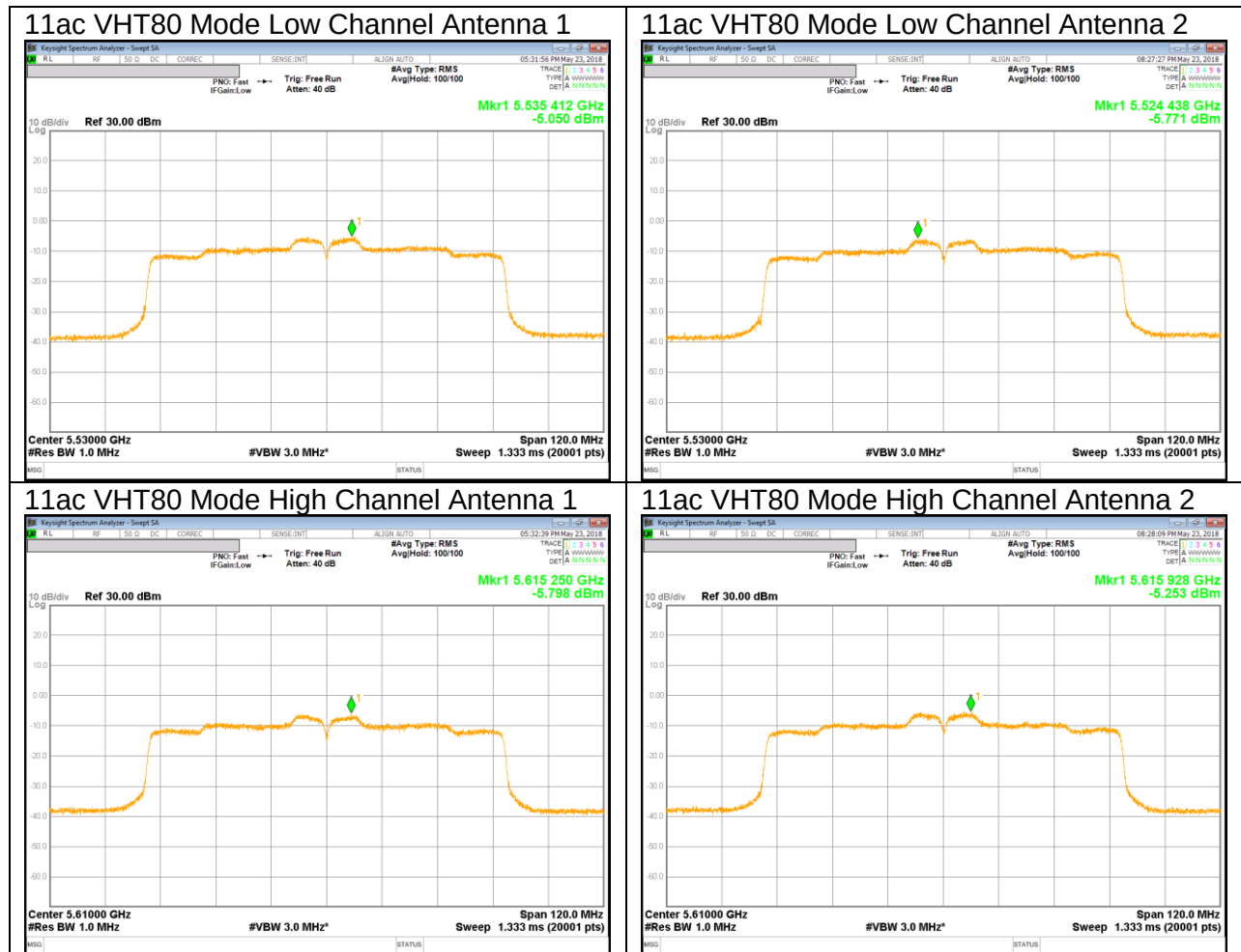
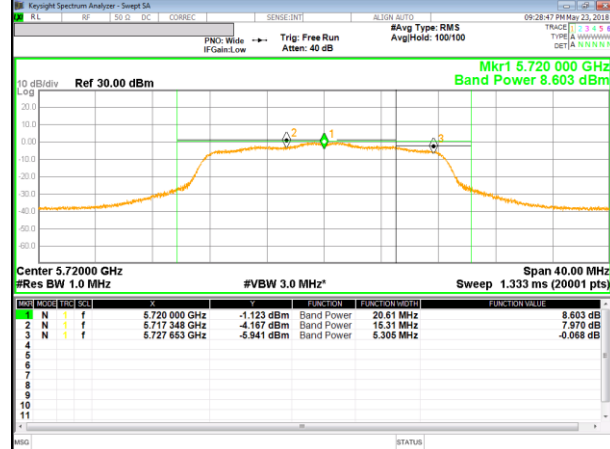


UNII 5.5 GHz IEEE 802.11ac VHT80 mode PSD

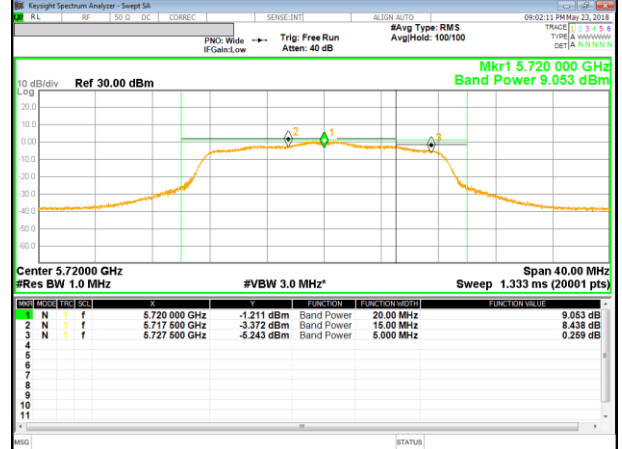


UNII Straddle Ch. IEEE 802.11a mode Ourput Power and PSD

11a Mode Output Power Antenna 1



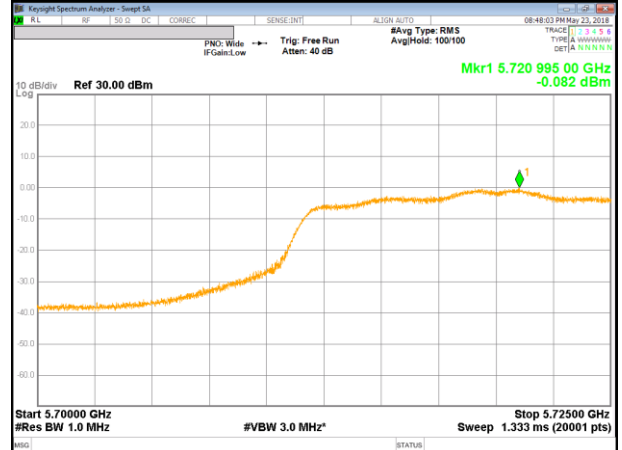
11a Mode Output Power Antenna 2



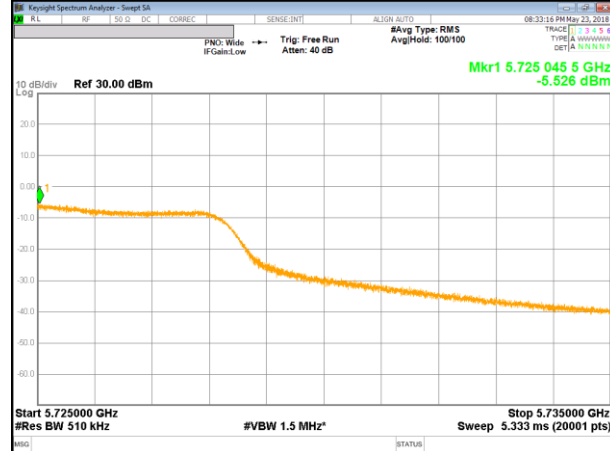
11a Mode UNII 2C PSD Antenna 1



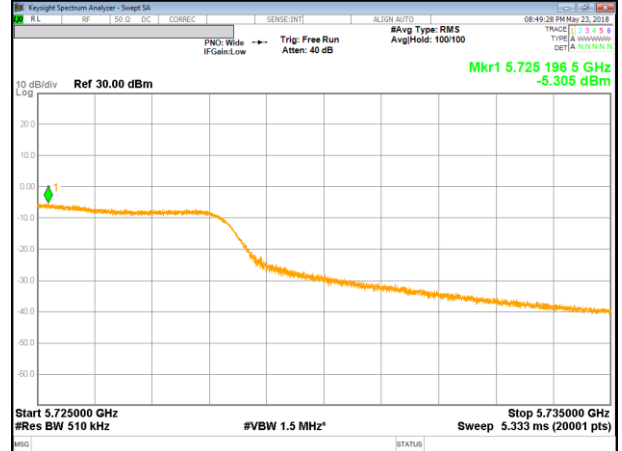
11a Mode UNII 2C PSD Antenna 2



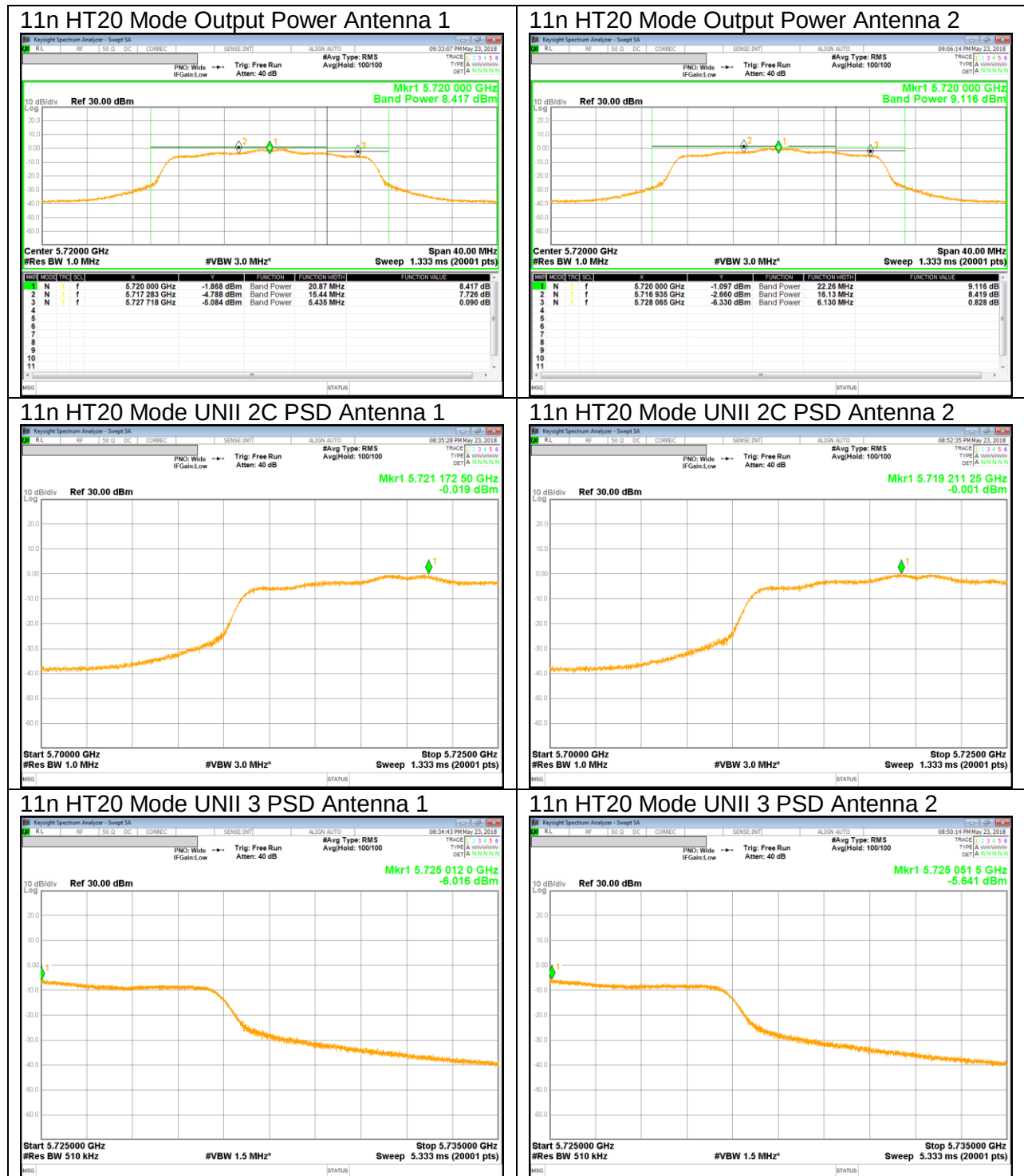
11a Mode UNII 3 PSD Antenna 1



11a Mode UNII 3 PSD Antenna 2

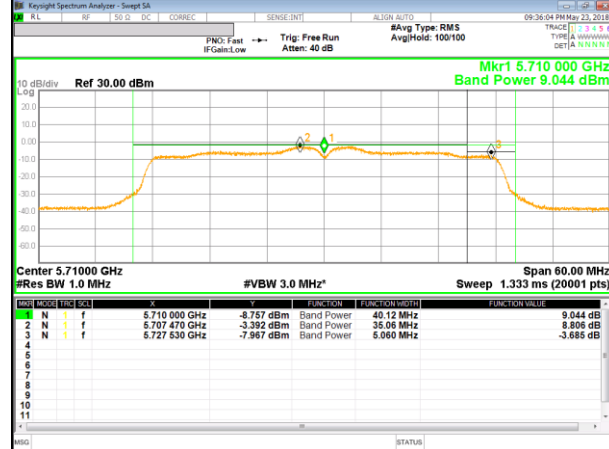


UNII Straddle Ch. IEEE 802.11n HT20 mode Ourput Power and PSD

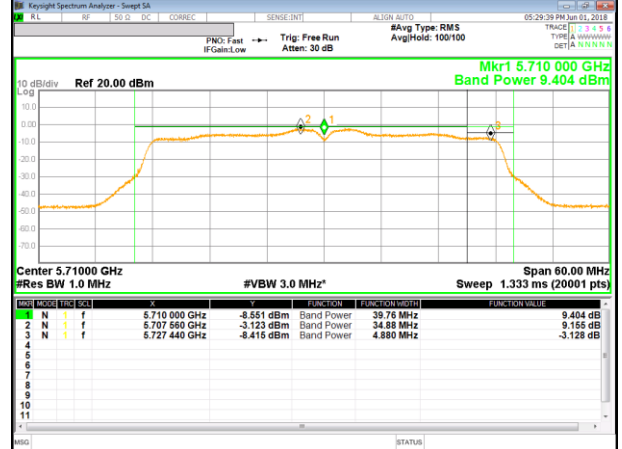


UNII Straddle Ch. IEEE 802.11n HT40 mode Ourput Power and PSD

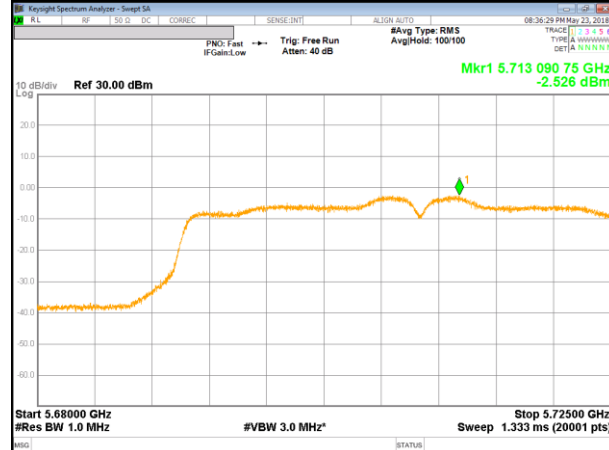
11n HT40 Mode Output Power Antenna 1



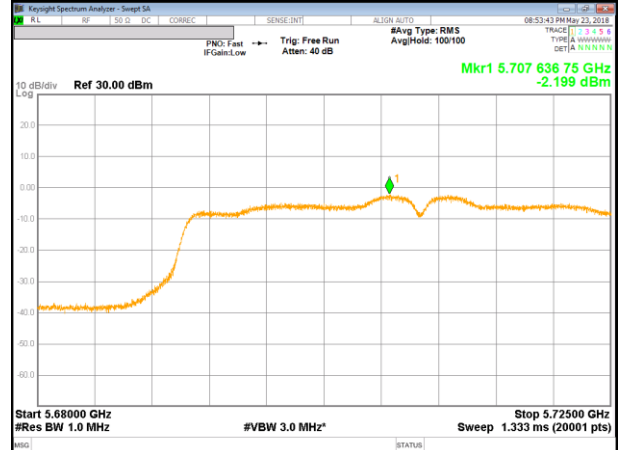
11n HT40 Mode Output Power Antenna 2



11n HT40 Mode UNII 2C PSD Antenna 1



11n HT40 Mode UNII 2C PSD Antenna 2



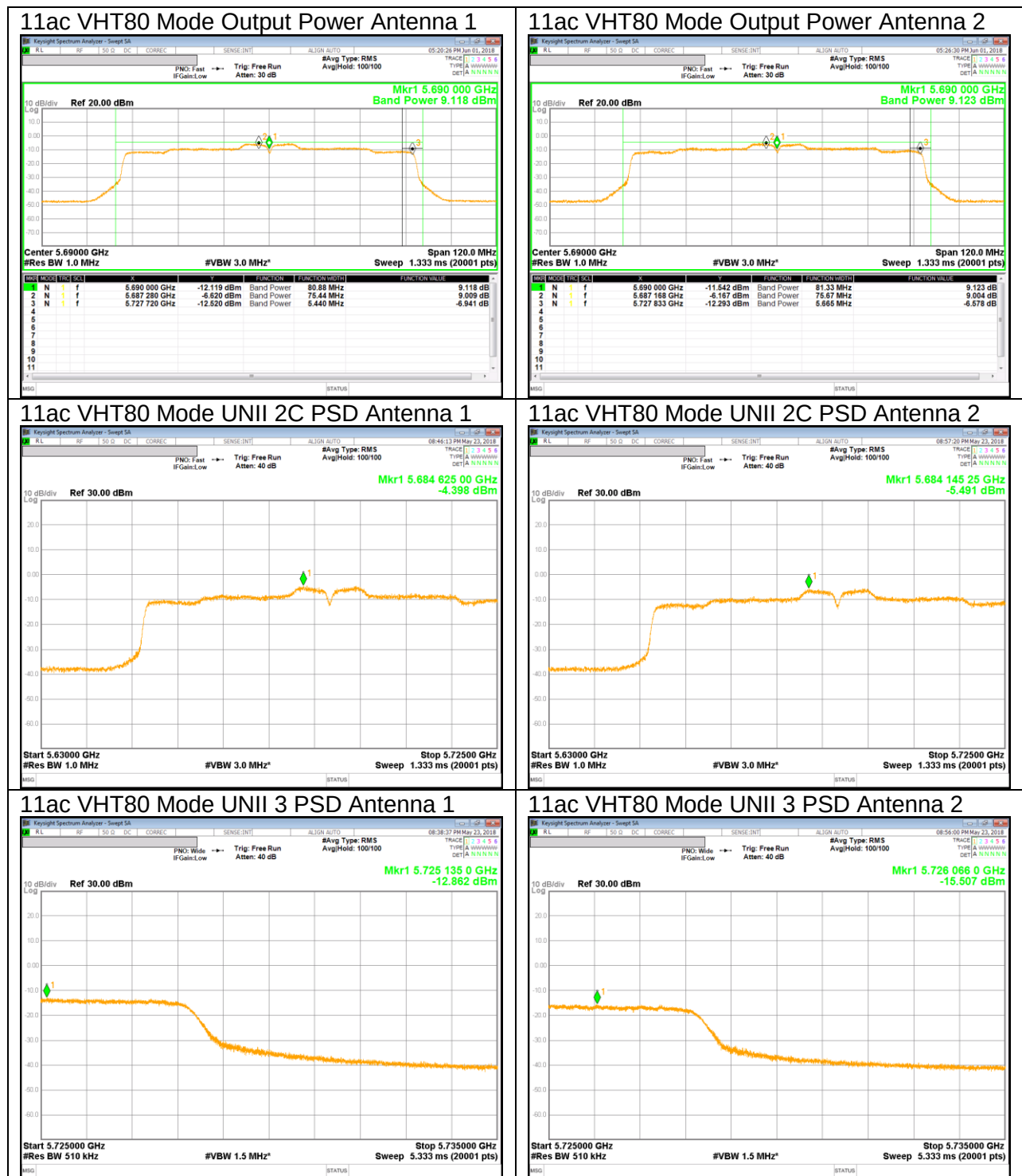
11n HT40 Mode UNII 3 PSD Antenna 1



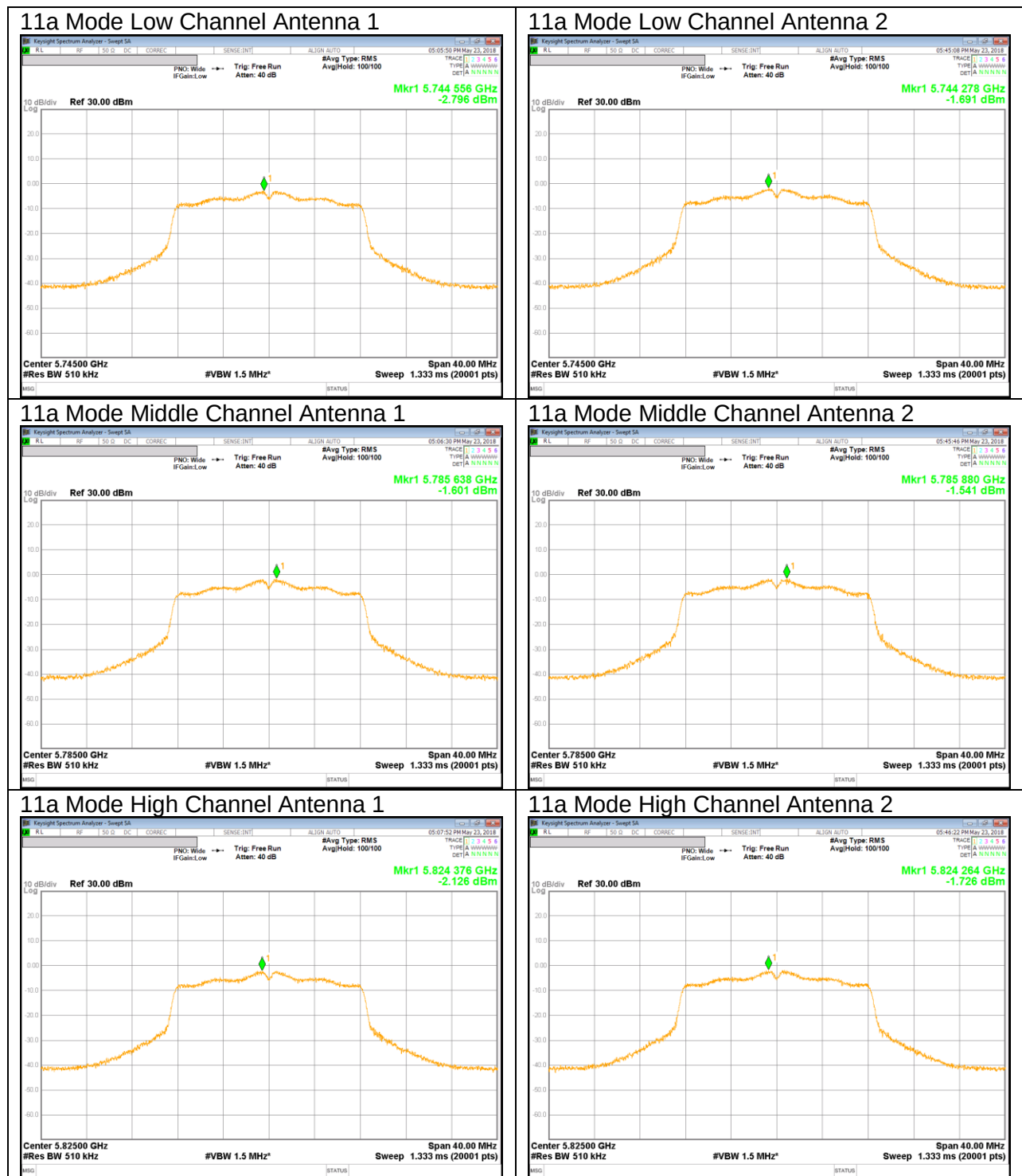
11n HT40 Mode UNII 3 PSD Antenna 2



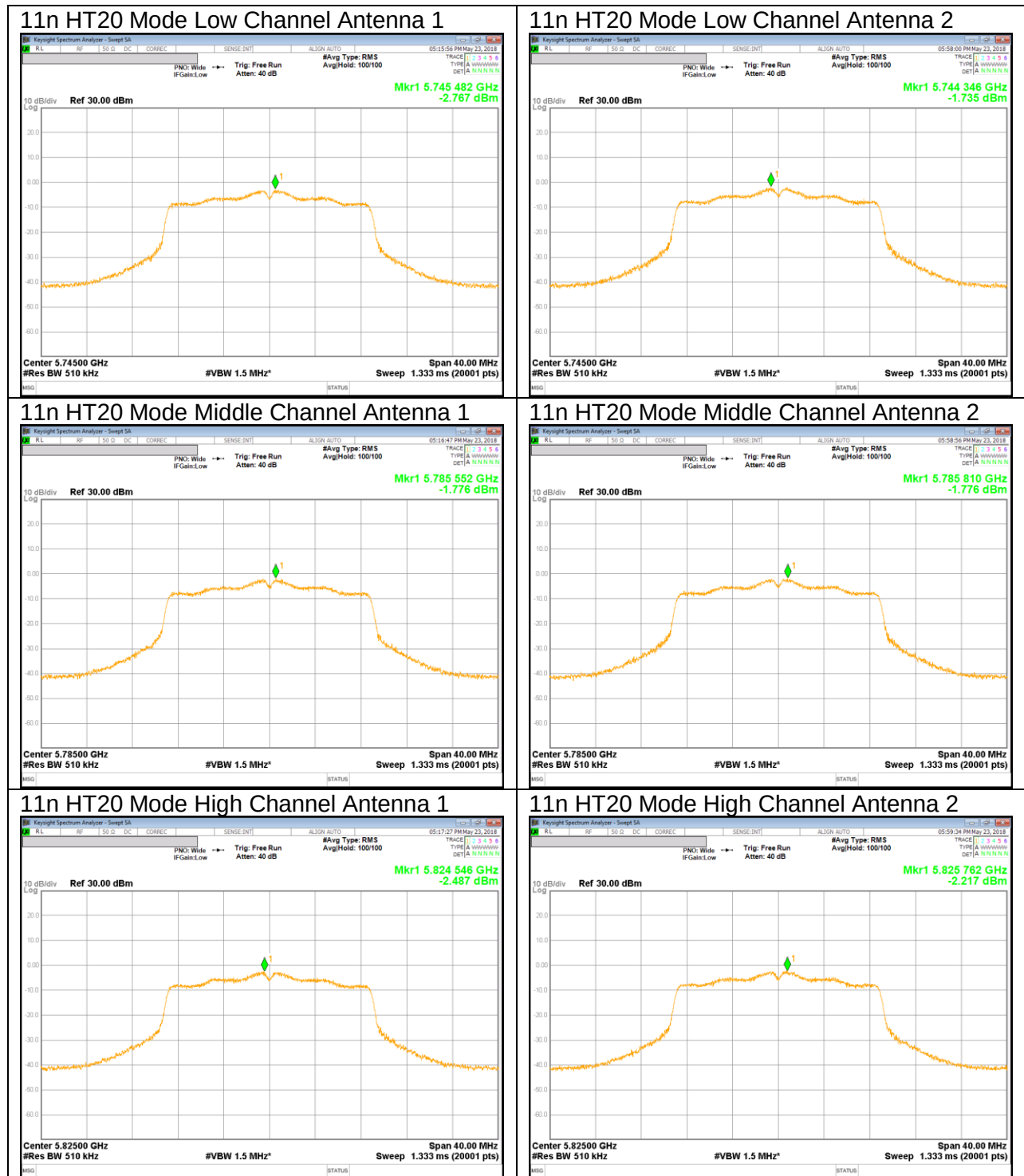
UNII Straddle Ch. IEEE 802.11ac VHT80 mode Ourput Power and PSD



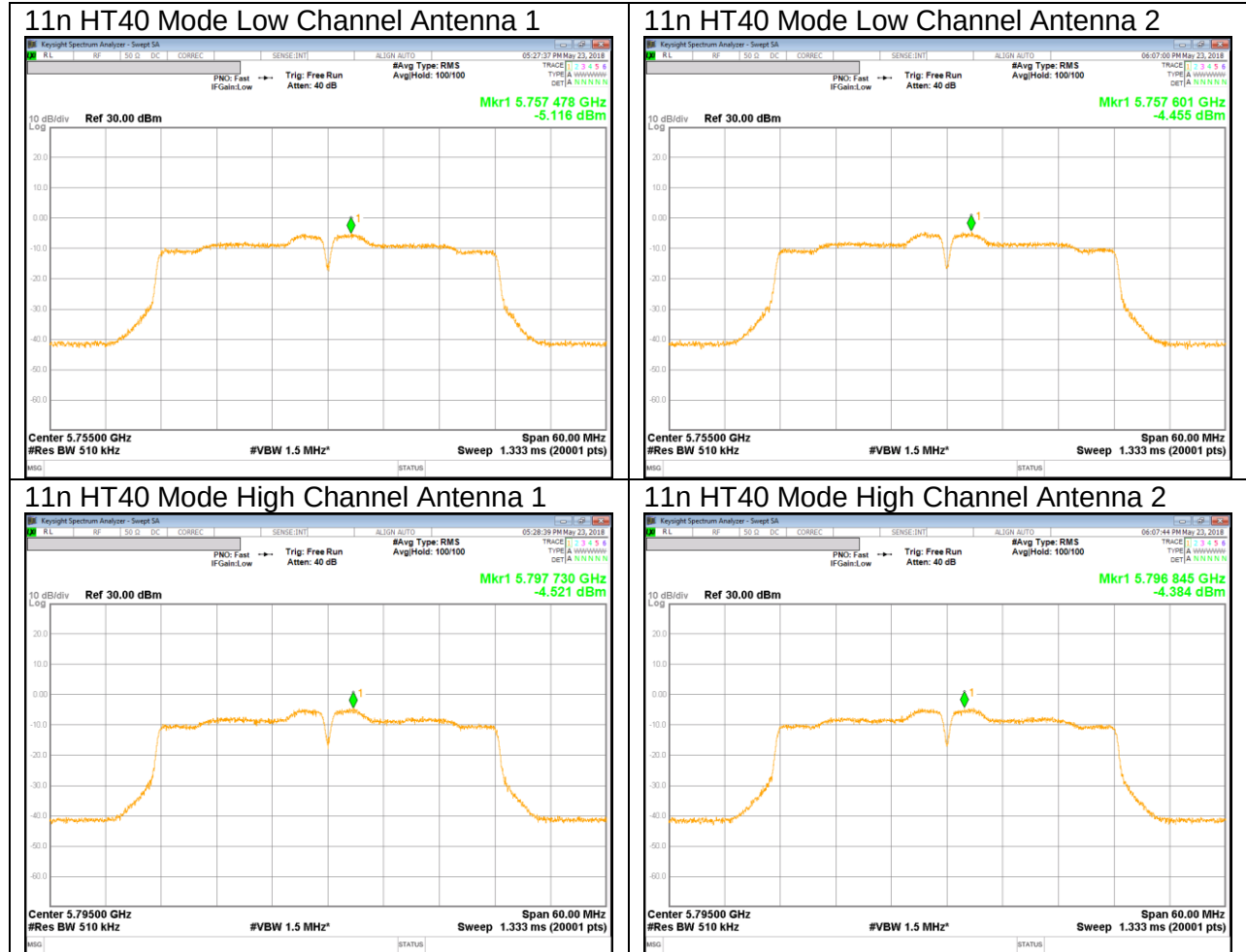
UNII 5.8 GHz IEEE 802.11a mode PSD



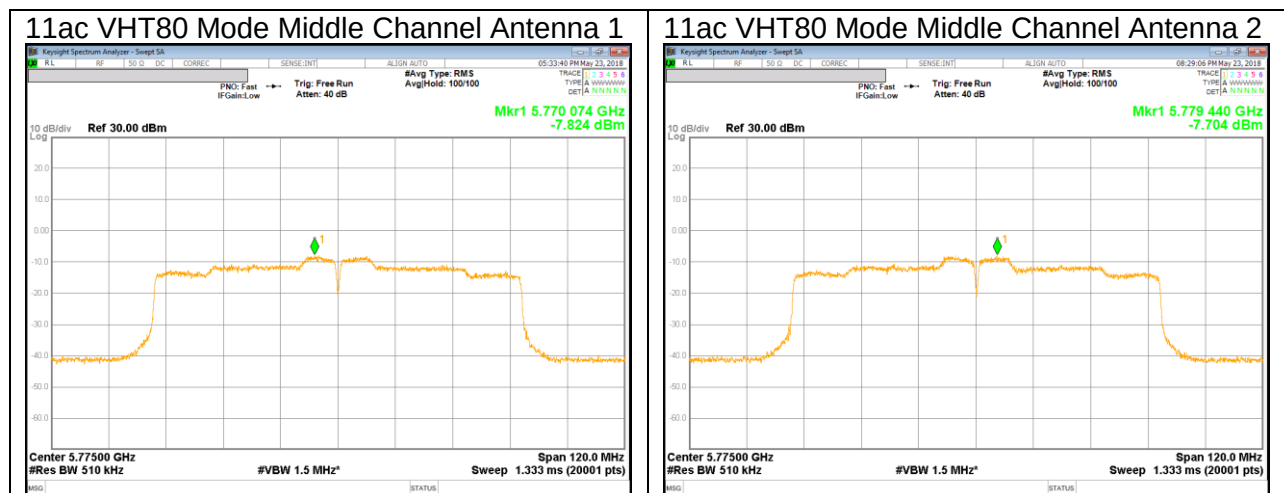
UNII 5.8 GHz IEEE 802.11n HT20 mode mode PSD



UNII 5.8 GHz IEEE 802.11n HT40 mode mode PSD



UNII 5.8 GHz IEEE 802.11ac VHT80 mode mode PSD



11. TRANSMITTER ABOVE 1 GHz

LIMITS

FCC §15.205 and §15.209

Limits for radiated disturbance of an intentional radiator		
Frequency range (MHz)	Limits (µV/m)	Measurement Distance (m)
0.009 – 0.490	2400 / F (kHz)	300
0.490 – 1.705	24000 / F (kHz)	30
1.705 – 30.0	30	30
30 – 88	100**	3
88 - 216	150**	3
216 – 960	200**	3
Above 960	500	3

** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g. §§ 15.231 and 15.241.

FCC §15.407 (b)

(b) Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

- (1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (4) For transmitters operating in the 5.725-5.85 GHz band:
 - (i) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.
- (5) The emission measurements shall be performed using a minimum resolution bandwidth of 1 MHz. A lower resolution bandwidth may be employed near the band edge, when necessary, provided the measured energy is integrated to show the total power over 1 MHz.

- (6) Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209. Further, any U-NII devices using an AC power line are required to comply also with the conducted limits set forth in §15.207.
- (7) The provisions of §15.205 apply to intentional radiators operating under this section.
- (8) When measuring the emission limits, the nominal carrier frequency shall be adjusted as close to the upper and lower frequency band edges as the design of the equipment permits.

Note

- Limit translation to field strength level (FCC §15.407)

$$E[\text{dBuV/m}] = \text{EIRP}[\text{dBm}] + 95.2 = -27\text{dBm} + 95.2 = 68.2\text{dBuV/m}$$

$$E[\text{dBuV/m}] = \text{EIRP}[\text{dBm}] + 95.2 = -17\text{dBm} + 95.2 = 78.2\text{dBuV/m}$$

TEST PROCEDURE

The EUT is placed on a non-conducting table 80 cm above the ground plane for below 1GHz and 150 cm for above 1GHz. The antenna to EUT distance is 3 meters. The EUT is configured in accordance with ANSI C63.10. The EUT is set to transmit in a continuous mode.

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

Reference to KDB 789033 D02 v02r01 UNII part G) 6) c) Method AD:

For measurements above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 3 MHz for peak measurements and add duty cycle factor to the reading offset for average measurements.

Pre-scans to detect harmonic and spurious emissions, the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 30 KHz for peak measurements.

The spectrum from 1GHz to 40 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each applicable band.

(From 30MHz to 1GHz, test was performed with the EUT set to transmit at the channel with highest output power)

The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized in both the vertical and the horizontal positions.

Note : Emission was pre-scanned from 9KHz to 30MHz; No emissions were detected which was at least 20dB below the specification limit (consider distance correction factor).
Per FCC part 15.31(o), test results were not reported.

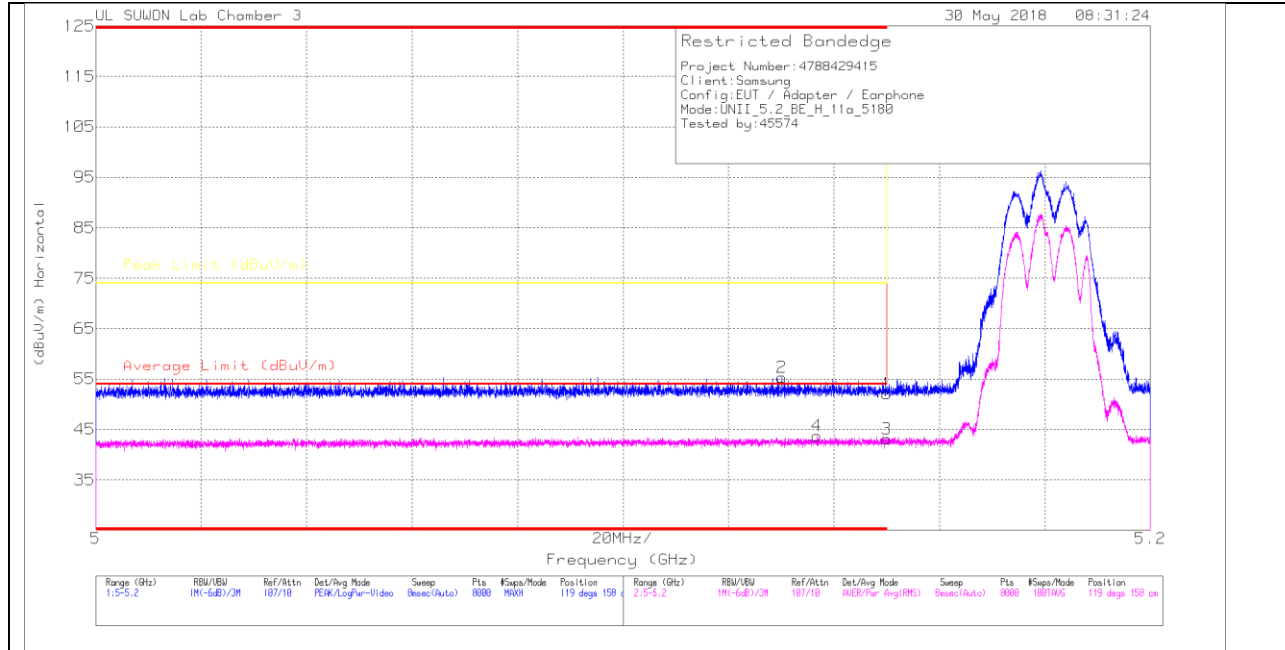
Although these tests were performed other than open area test site, adequate comparison measurements were confirmed against 30 m open area test site.
Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the one of tests made in an open field based on KDB 414788.

11.1. 5.2 GHz

11.1.1. TX Above 1GHz 802.11a 2Tx CDD MODE IN THE 5.2GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	311700205959	10dB_ATT[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Pk Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.15	36.65	Pk	34.3	-18.8	0	52.15	-	-	74	-21.85	119	158	H
2	* 5.13	39.92	Pk	34.3	-18.9	0	55.32	-	-	74	-18.68	119	158	H
3	* 5.15	28.02	RMS	34.3	-19.3	.12	43.14	54	-10.86	-	-	119	158	H
4	* 5.137	28.61	RMS	34.3	-19.3	.12	43.73	54	-10.27	-	-	119	158	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

UL SUWON Lab Chamber 3

30 May 2018 08:43:49

Restricted Bandedge

Project Number: 4788429415
 Client: Samsung
 Config: EUT / Adapter / Earphone
 Mode: UNII_5.2_BE_V11a_5188
 Tested by: 45574

Peak Limit (dBU/m)

Average Limit (dBU/m)

20MHz/

Frequency (GHz)

Range (GHz)	RBW/BBW	Ref/Alt	Det/Avg Mode	Sweep	PL	Flags/Mode	Position	Range (GHz)	RBW/BBW	Ref/Alt	Det/Avg Mode	Sweep	PL	Flags/Mode	Position
1.5-5.2	1K-5dB/3M	107/18	PEAK/LogPwr-Video	Basic/Auto	000	None	168 degs 235	2.5-5.2	1K-5dB/3M	107/18	PEAK/LogPwr-Video	Basic/Auto	000	None	168 degs 235

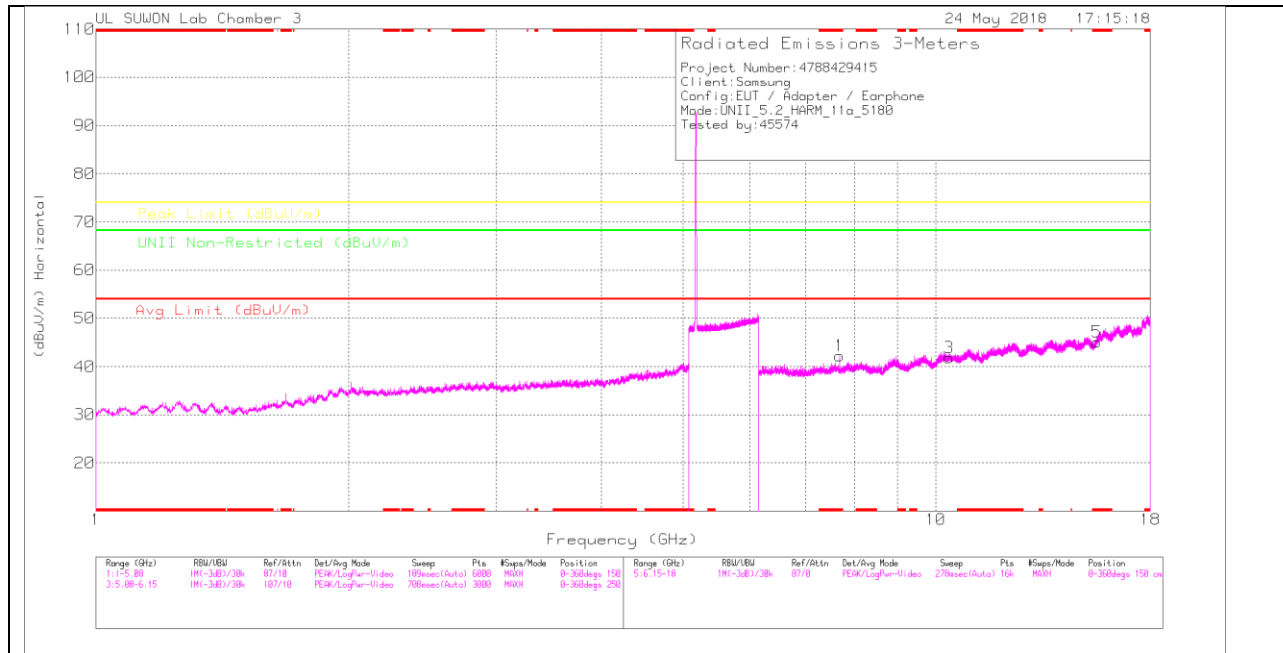
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117.002059599	10dBr_ATT[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.15	37.31	PK	34.3	-18.8	0	52.81	-	-	74	-21.19	160	235	V
2	* 5.055	40.38	PK	34.2	-18.9	0	55.68	-	-	74	-18.32	160	235	V
3	* 5.15	27.2	RMS	34.3	-19.3	.12	42.32	54	-11.68	-	-	160	235	V
4	* 5.079	28.86	RMS	34.2	-19.4	.12	43.78	54	-10.22	-	-	160	235	V

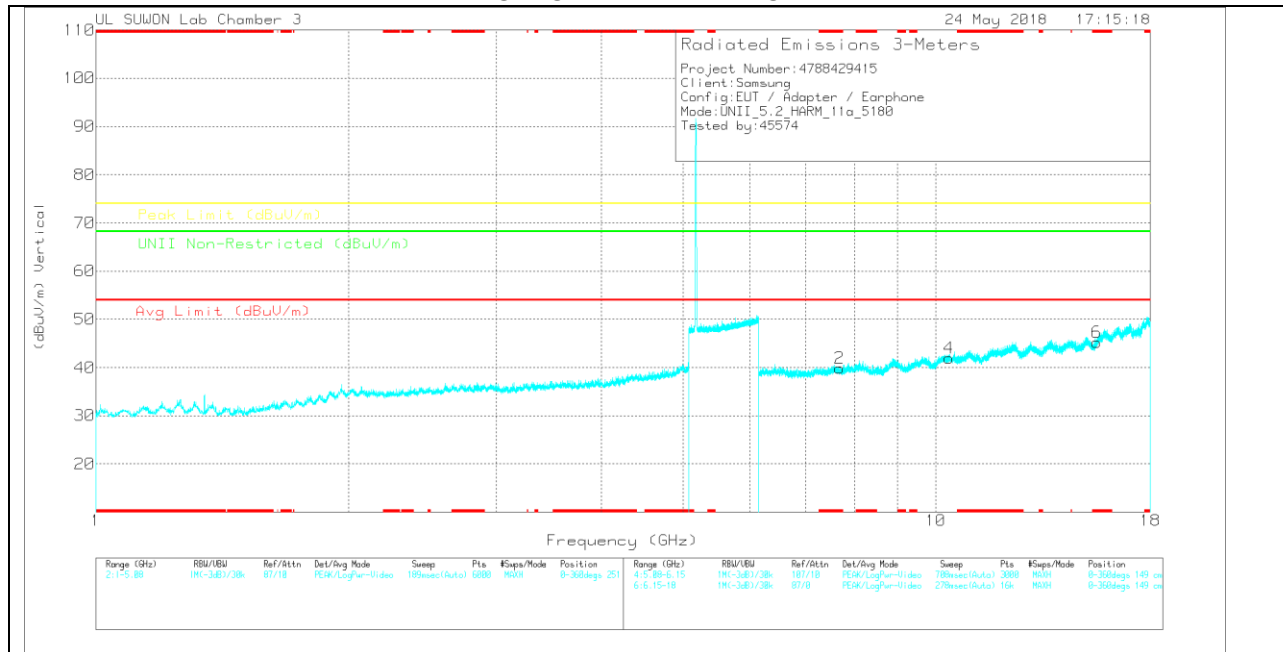
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0205959)	@GHz_HF(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unl Non-Restricted (dBuV/m)	Margin (dB)	Altitude (Degs)	Height (cm)	Polarity
1	* 7.679	29.99	PK	35.6	-23.3	0	42.29	-	-	74	-31.71	-	-	0-360	150	H
3	10.361	23.51	PK	37.5	-19.2	0	41.81	-	-	-	-	68.2	-26.39	0-360	250	H
5	* 15.54	24.91	PK	40	-19.8	0	45.11	-	-	74	-28.89	-	-	0-360	250	H
2	* 7.679	27.55	PK	35.6	-23.3	0	39.85	-	-	74	-34.15	-	-	0-360	149	V
4	10.361	23.68	PK	37.5	-19.2	0	41.98	-	-	-	-	68.2	-26.22	0-360	149	V
6	* 15.54	25	PK	40	-19.8	0	45.2	-	-	74	-28.8	-	-	0-360	250	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK – Peak Detector

Radiated Emissions

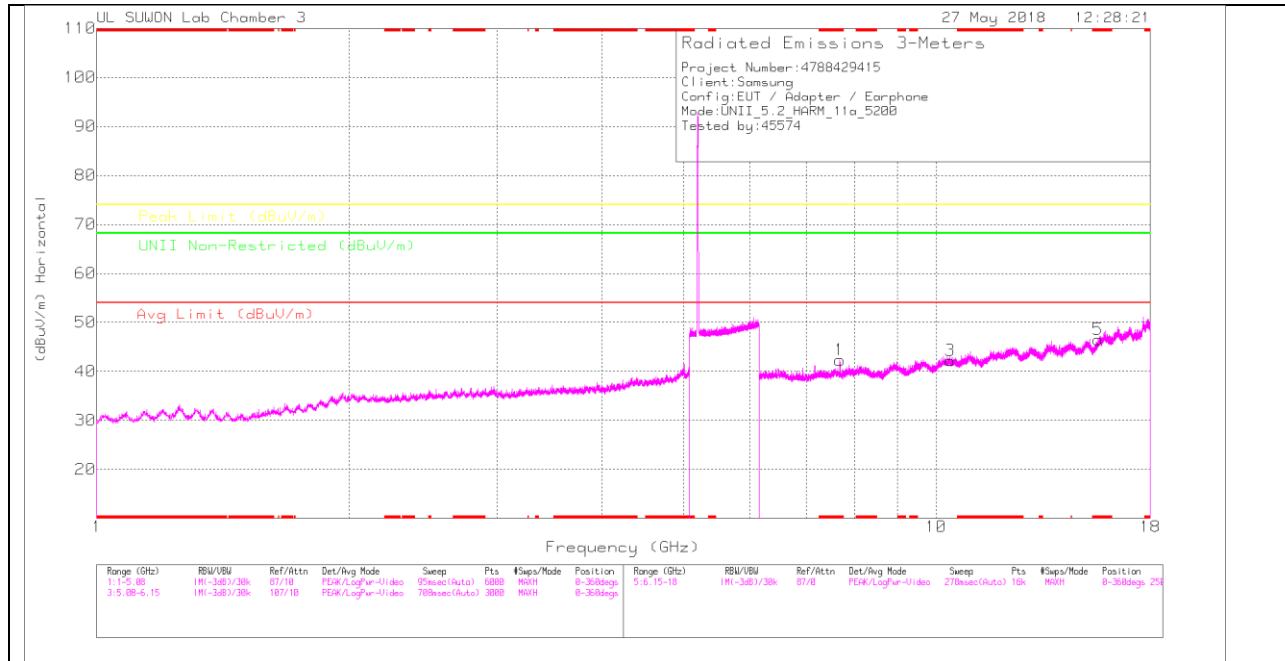
Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0205959)	@GHz_HF(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unl Non-Restricted (dBuV/m)	Margin (dB)	Altitude (Degs)	Height (cm)	Polarity
* 7.68	33.99	PK-U	35.6	-23.3	0	46.29	-	-	74	-27.71	-	-	111	236	H
* 7.68	26.71	ADR	35.6	-23.3	.12	39.13	54	-14.87	-	-	-	-	111	236	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

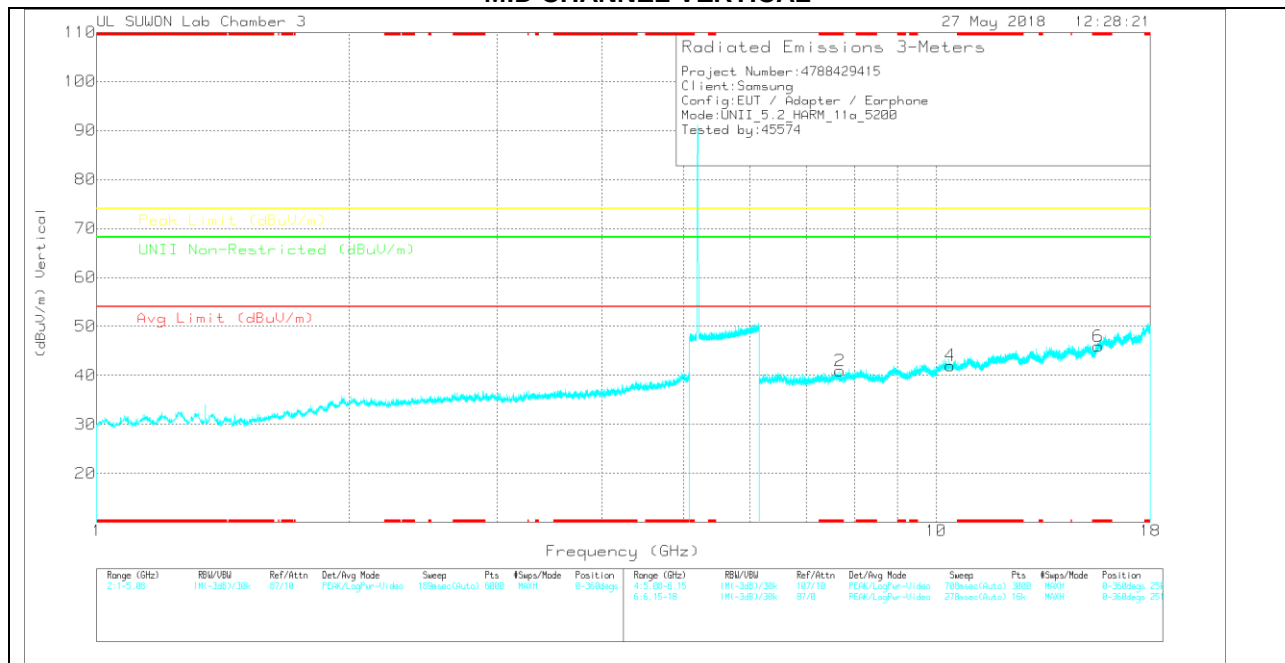
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

MID CHANNEL HORIZONTAL



MID CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00205959)	60Hz_HF(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNI Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 7.679	30	PK	35.6	-23.3	0	42.3	-	-	74	-31.7	-	-	0-360	250	H
3	10.401	24	PK	37.5	-19.3	0	42.2	-	-	-	-	68.2	-26	0-360	150	H
5	* 15.6	25.7	PK	40.2	-19.4	0	46.5	-	-	74	-27.5	-	-	0-360	250	H
2	* 7.679	28.66	PK	35.6	-23.3	0	40.96	-	-	74	-33.04	-	-	0-360	251	V
4	10.401	23.81	PK	37.5	-19.3	0	42.01	-	-	-	-	68.2	-26.19	0-360	149	V
6	* 15.601	25.06	PK	40.2	-19.3	0	45.96	-	-	74	-28.04	-	-	0-360	149	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK – Peak Detector

Radiated Emissions

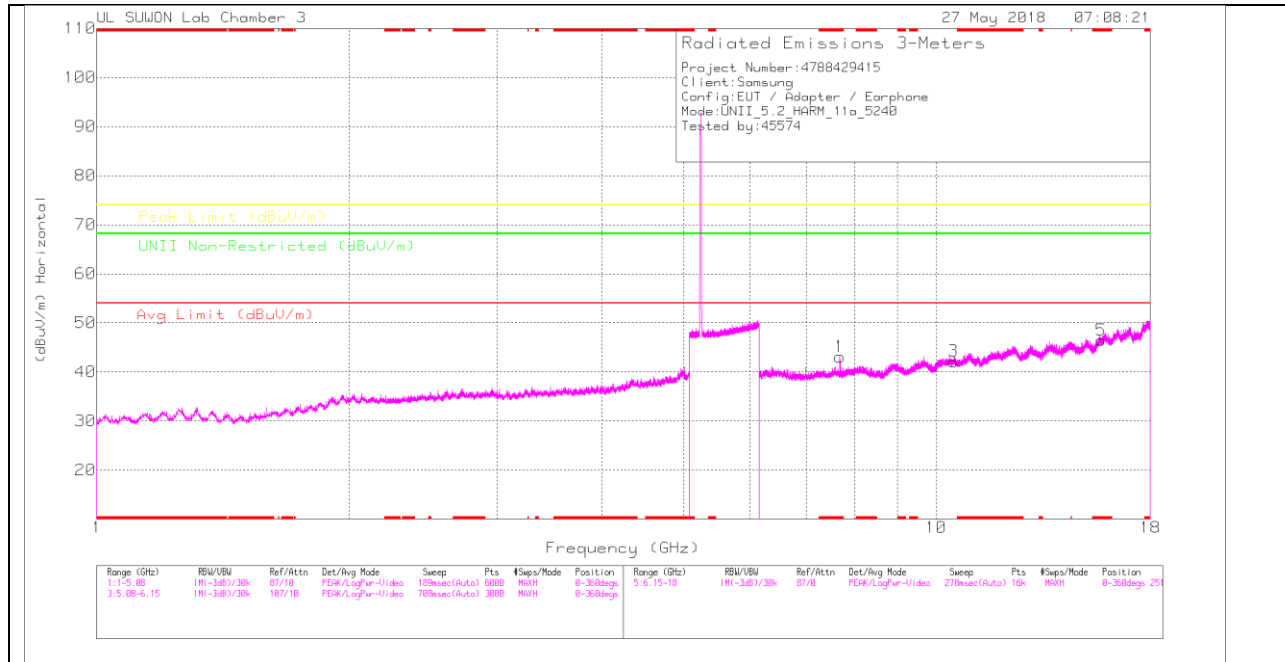
Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00205959)	60Hz_HF(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNI Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 7.68	33.46	PK-U	35.6	-23.3	0	45.76	-	-	74	-28.24	-	-	111	236	H
* 7.68	26.86	ADR	35.6	-23.3	.12	39.28	54	-14.72	-	-	-	-	111	236	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

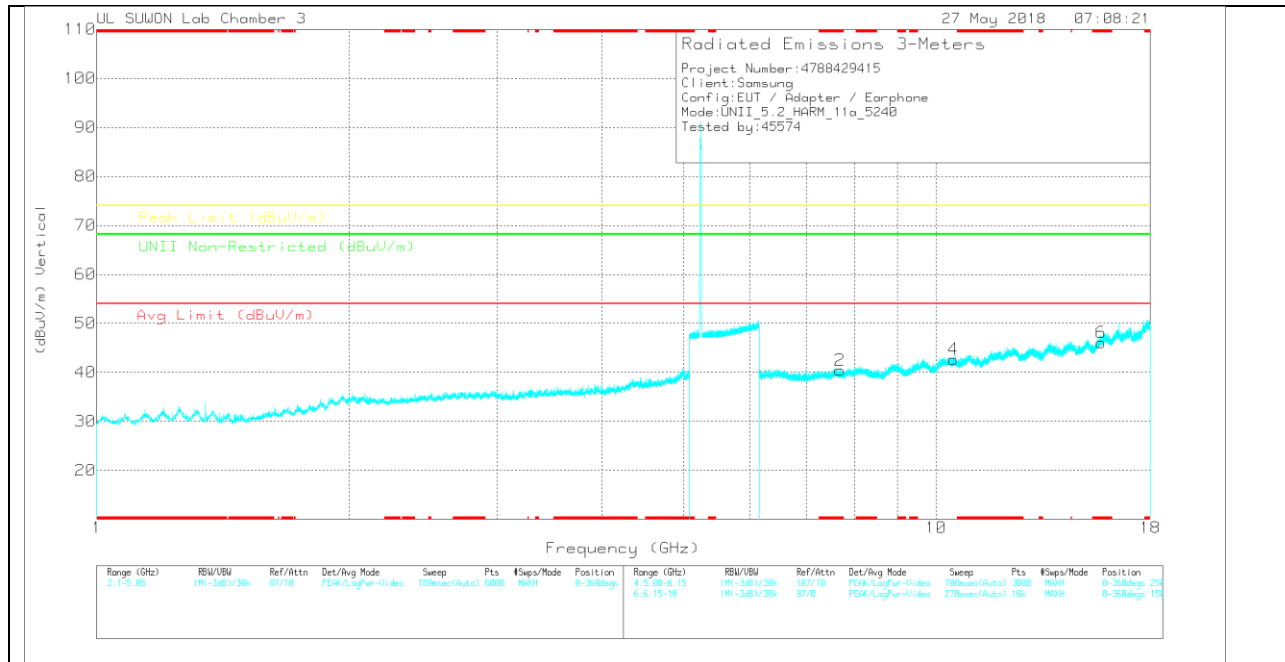
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

HIGH CHANNEL HORIZONTAL



HIGH CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0205959)	6GHz_HF(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	U-NII Non-Restricted (dBuV/m)	Margin (dB)	Altitude (Degs)	Height (cm)	Polarity
1	* 7.679	30.77	PK	35.6	-23.3	0	43.07	-	-	74	-30.93	-	-	0-360	150	H
3	10.481	23.76	PK	37.7	-19.3	0	42.16	-	-	-	-	68.2	-26.04	0-360	150	H
5	* 15.72	25.17	PK	40.5	-19.2	0	46.47	-	-	74	-27.53	-	-	0-360	150	H
2	* 7.68	28.13	PK	35.6	-23.3	0	40.43	-	-	74	-33.57	-	-	0-360	150	V
4	10.481	24.25	PK	37.7	-19.3	0	42.65	-	-	-	-	68.2	-25.55	0-360	150	V
6	* 15.72	24.78	PK	40.5	-19.2	0	46.08	-	-	74	-27.92	-	-	0-360	150	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK – Peak Detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0205959)	6GHz_HF(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	U-NII Non-Restricted (dBuV/m)	Margin (dB)	Altitude (Degs)	Height (cm)	Polarity
* 7.68	34.83	PK-U	35.6	-23.3	0	47.13	-	-	74	-26.87	-	-	111	235	H
* 7.68	27.72	ADR	35.6	-23.3	.12	40.14	54	-13.86	-	-	-	-	111	235	H

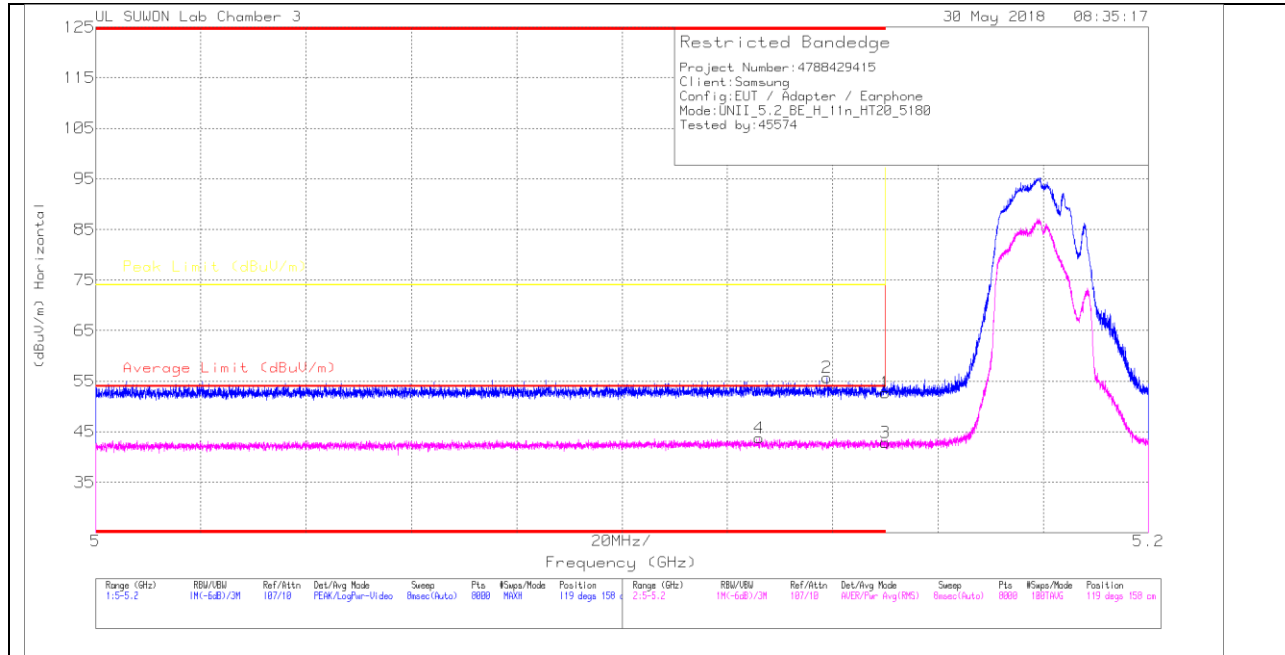
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

11.1.2.TX Above 1GHz 802.11n HT20 2Tx CDD MODE IN THE 5.2GHz BAND RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

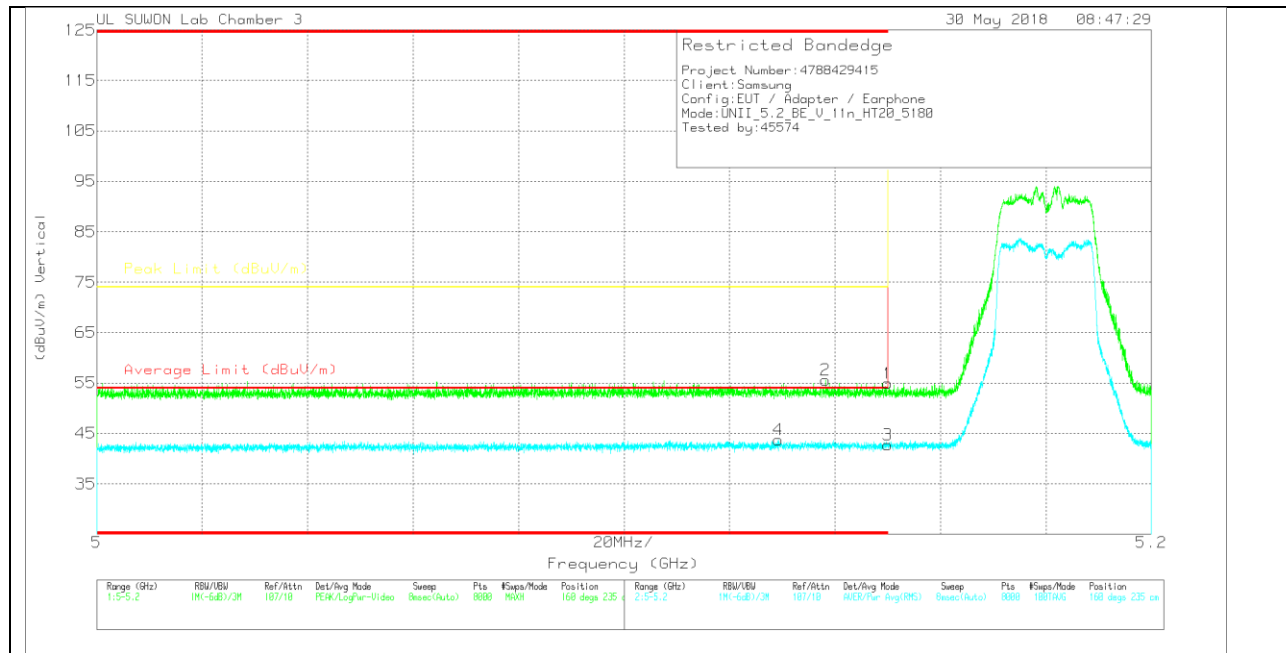
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00205959)	10dB_ATT(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Altitude (Degs)	Height (cm)	Polarity
1	* 5.15	37.21	Pk	34.3	-18.8	0	52.71	-	-	74	-21.29	119	158	H
2	* 5.139	40.28	Pk	34.3	-18.9	0	55.68	-	-	74	-18.32	119	158	H
3	* 5.15	27.73	RMS	34.3	-19.3	.14	42.87	54	-11.13	-	-	119	158	H
4	* 5.126	28.66	RMS	34.3	-19.3	.14	43.8	54	-10.2	-	-	119	158	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117[00205959]	10dBr_ATT[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.15	39.4	Pk	34.3	-18.8	0	54.9	-	-	74	-19.1	160	235	V
2	* 5.138	40.03	Pk	34.3	-18.8	0	55.53	-	-	74	-18.47	160	235	V
3	* 5.15	27.64	RMS	34.3	-19.3	.14	42.78	54	-11.22	-	-	160	235	V
4	* 5.129	28.55	RMS	34.3	-19.3	.14	43.69	54	-10.31	-	-	160	235	V

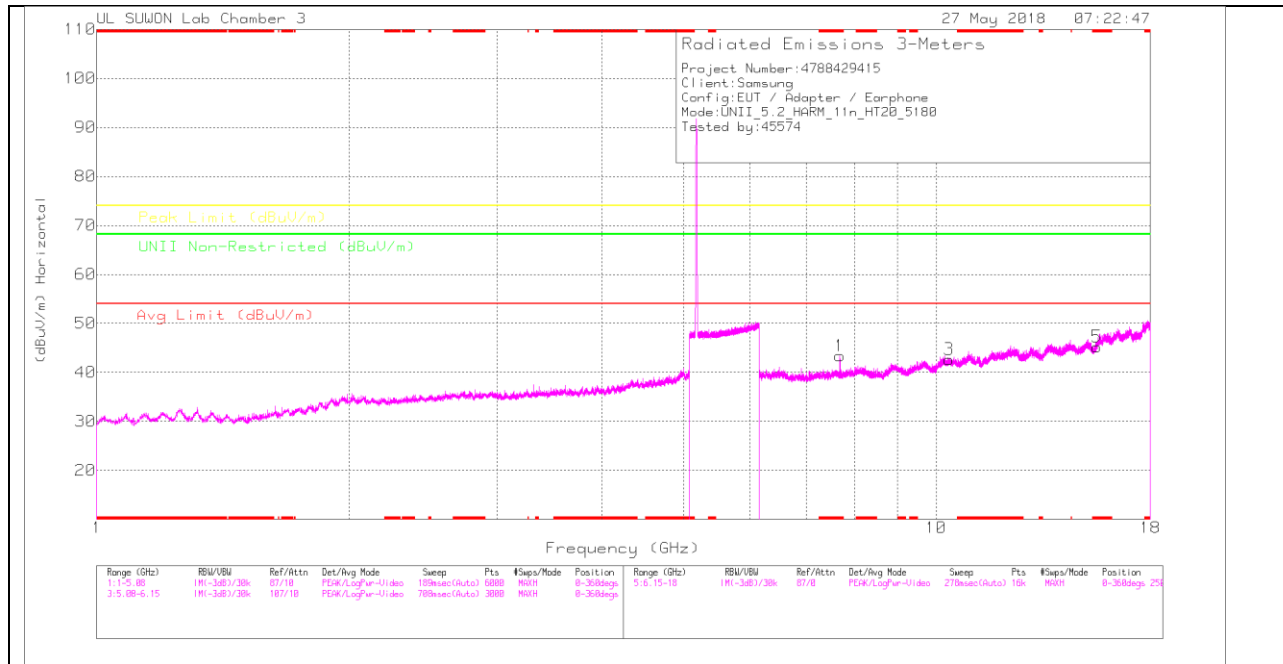
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

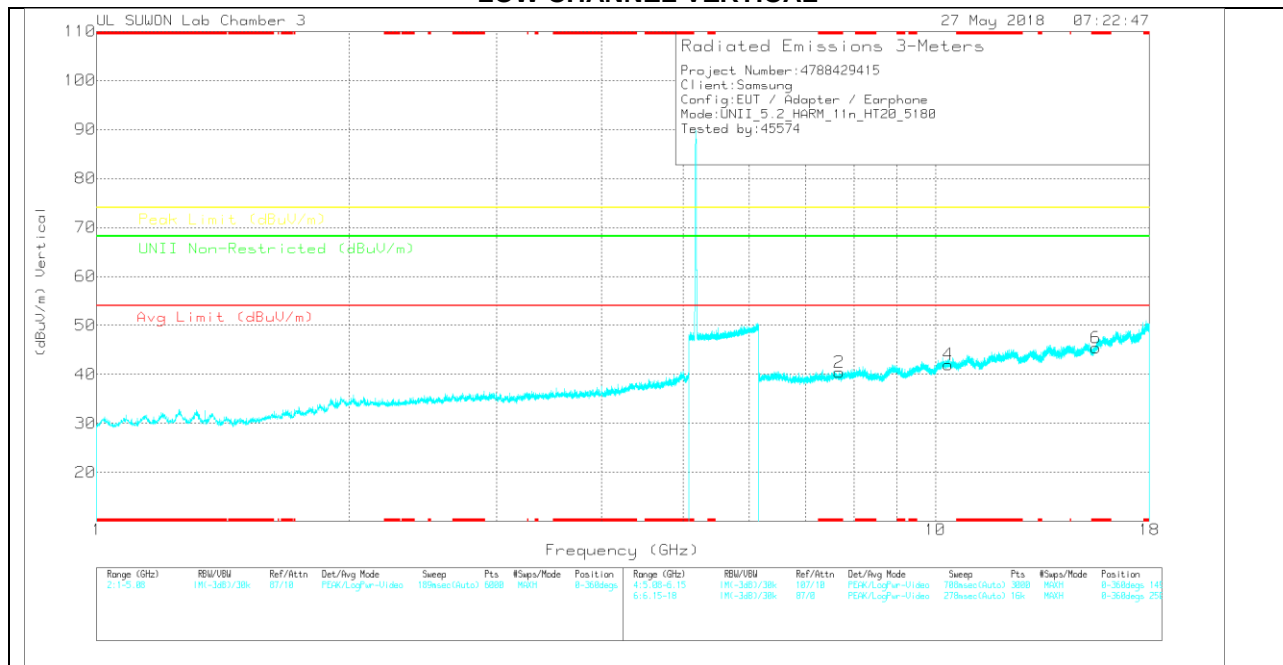
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0205959)	6GHz_HF(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	ULI Non-Restricted (dBuV/m)	Margin (dB)	Asimuth (Degs)	Height (cm)	Polarity
1	* 7.679	31.04	PK	35.6	-23.3	0	43.34	-	-	74	-30.66	-	-	0-360	250	H
3	10.36	24.46	PK	37.5	-19.3	0	42.66	-	-	-	-	68.2	-25.54	0-360	250	H
5	* 15.54	25.01	PK	40	-19.8	0	45.21	-	-	74	-28.79	-	-	0-360	250	H
2	* 7.679	28.09	PK	35.6	-23.3	0	40.39	-	-	74	-33.61	-	-	0-360	250	V
4	10.361	23.71	PK	37.5	-19.2	0	42.01	-	-	-	-	68.2	-26.19	0-360	250	V
6	* 15.54	25.24	PK	40	-19.8	0	45.44	-	-	74	-28.56	-	-	0-360	149	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK – Peak Detector

Radiated Emissions

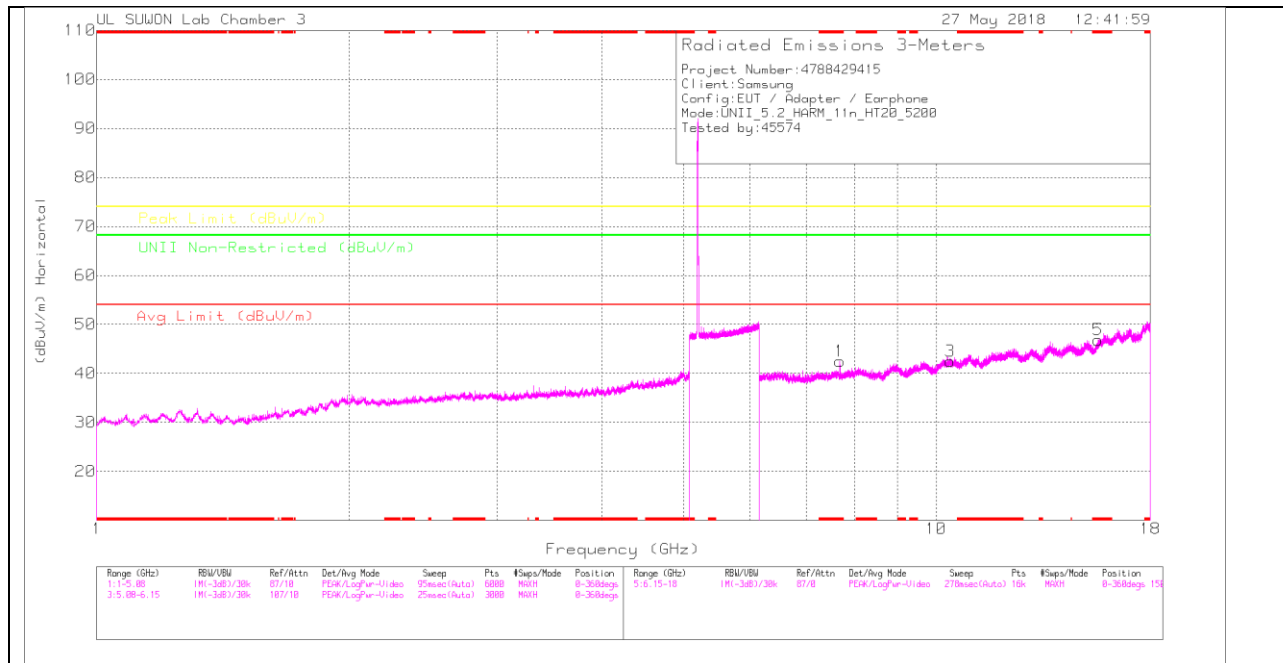
Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0205959)	6GHz_HF(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	ULI Non-Restricted (dBuV/m)	Margin (dB)	Asimuth (Degs)	Height (cm)	Polarity
* 7.687	34.13	PK-U	35.6	-23.4	0	46.33	-	-	74	-27.67	-	-	111	235	H
* 7.68	27.3	ADR	35.6	-23.3	.14	39.74	54	-14.26	-	-	-	-	111	235	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

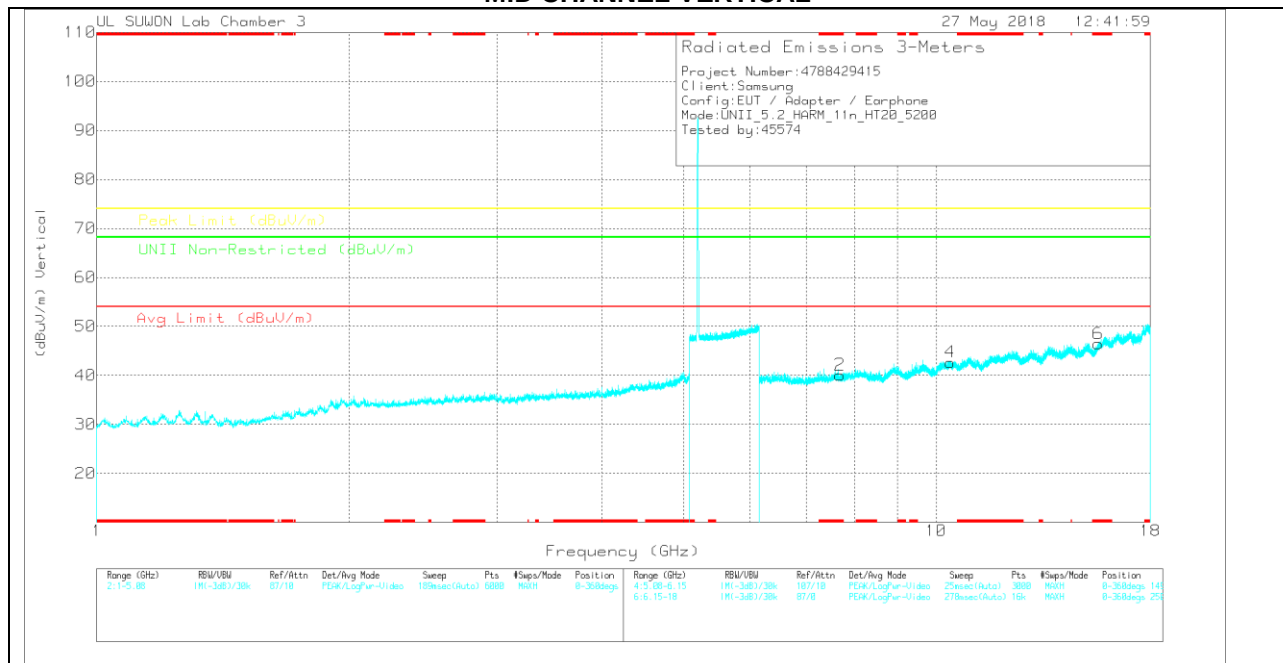
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

MID CHANNEL HORIZONTAL



MID CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00205959)	6GHz_HF(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Asimuth (Degs)	Height (cm)	Polarity
1	* 7.679	30.16	PK	35.6	-23.3	0	42.46	-	-	74	-31.54	-	-	0-360	250	H
3	10.396	24.25	PK	37.5	-19.3	0	42.45	-	-	-	-	68.2	-25.75	0-360	150	H
5	* 15.599	26	PK	40.2	-19.4	0	46.8	-	-	74	-27.2	-	-	0-360	250	H
2	* 7.68	27.79	PK	35.6	-23.3	0	40.09	-	-	74	-33.91	-	-	0-360	150	V
4	10.396	24.48	PK	37.5	-19.3	0	42.68	-	-	-	-	68.2	-25.52	0-360	250	V
6	* 15.601	25.52	PK	40.2	-19.3	0	46.42	-	-	74	-27.58	-	-	0-360	150	V

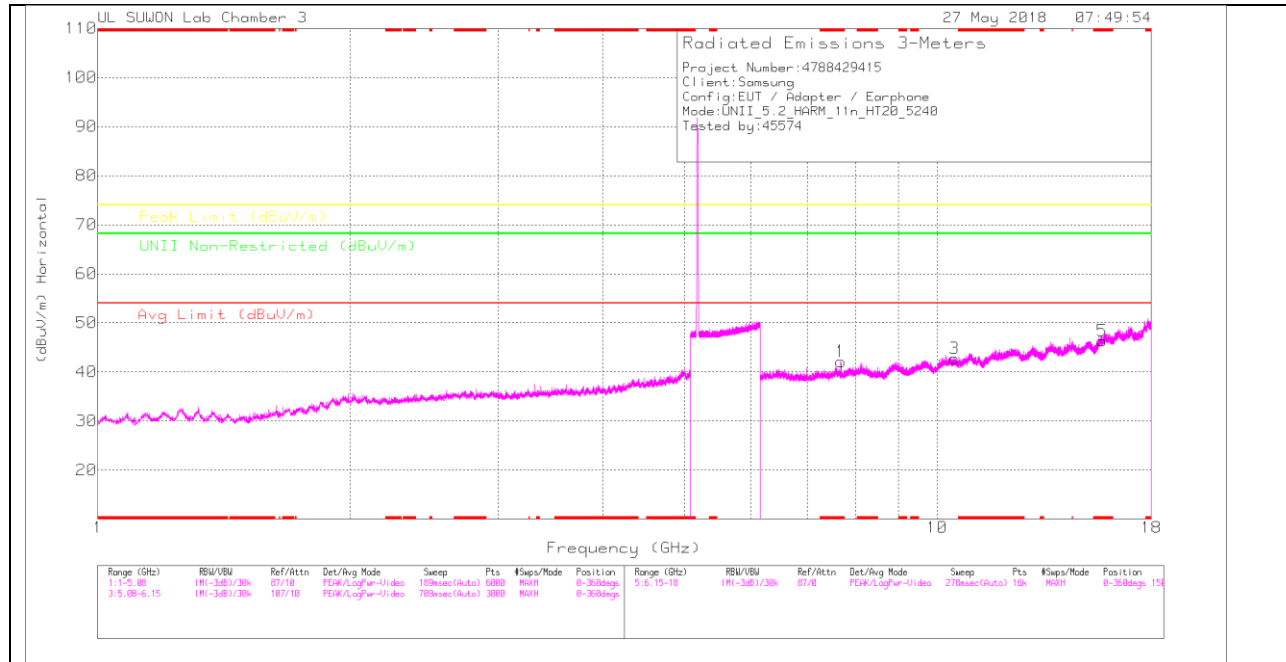
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
PK – Peak Detector

Radiated Emissions

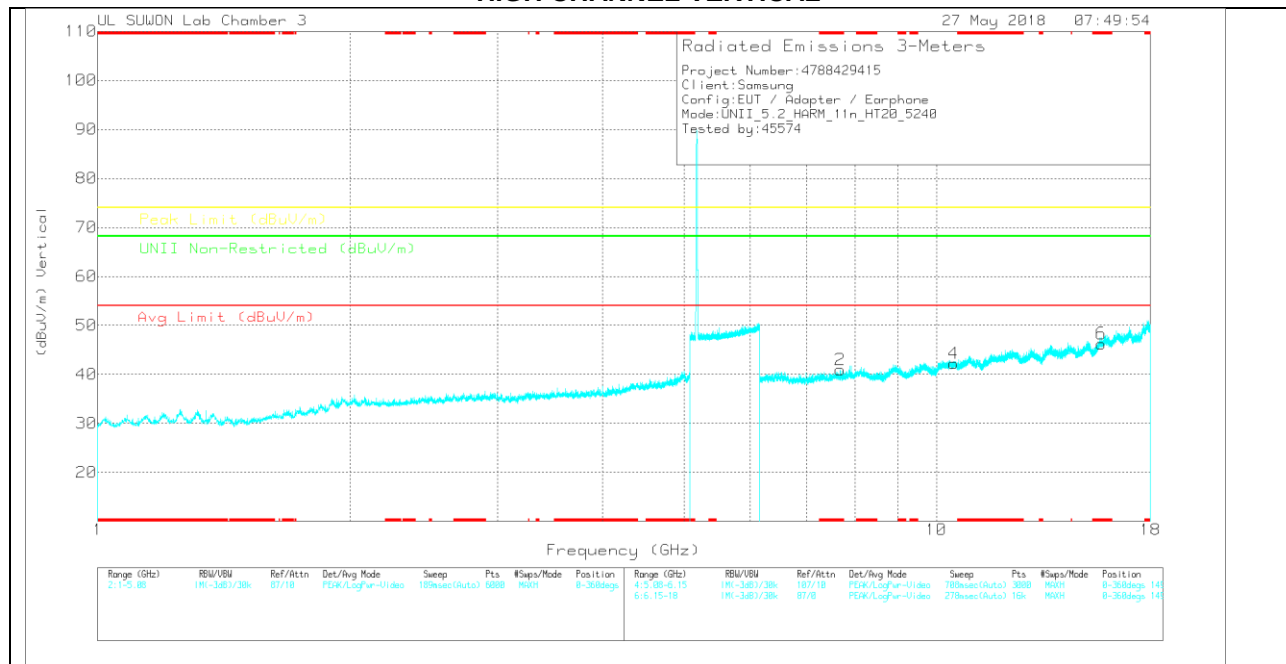
Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00205959)	6GHz_HF(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Asimuth (Degs)	Height (cm)	Polarity
* 7.676	33.55	PK-U	35.6	-23.3	0	45.85	-	-	74	-28.15	-	-	111	235	H
* 7.68	27.09	ADR	35.6	-23.3	.14	39.53	54	-14.47	-	-	-	-	111	235	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
PK-U - U-NII: Maximum Peak
ADR - U-NII AD primary method, RMS average

HIGH CHANNEL HORIZONTAL



HIGH CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00205959)	6GHz_HF(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Aug Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	U-NII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 7.679	29.83	PK	35.6	-23.3	0	42.13	-	-	74	-31.87	-	-	0-360	150	H
3	10.481	24.34	PK	37.7	-19.3	0	42.74	-	-	-	-	68.2	-25.46	0-360	150	H
5	* 15.72	25	PK	40.5	-19.2	0	46.3	-	-	74	-27.7	-	-	0-360	250	H
2	* 7.679	28.61	PK	35.6	-23.3	0	40.91	-	-	74	-33.09	-	-	0-360	251	V
4	10.481	23.83	PK	37.7	-19.3	0	42.23	-	-	-	-	68.2	-25.97	0-360	149	V
6	* 15.72	24.95	PK	40.5	-19.2	0	46.25	-	-	74	-27.75	-	-	0-360	149	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK – Peak Detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00205959)	6GHz_HF(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Aug Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	U-NII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 7.68	34.23	PK-U	35.6	-23.3	0	46.53	-	-	74	-27.47	-	-	111	235	H
* 7.68	26.72	ADR	35.6	-23.3	.14	39.16	54	-14.84	-	-	-	-	111	235	H

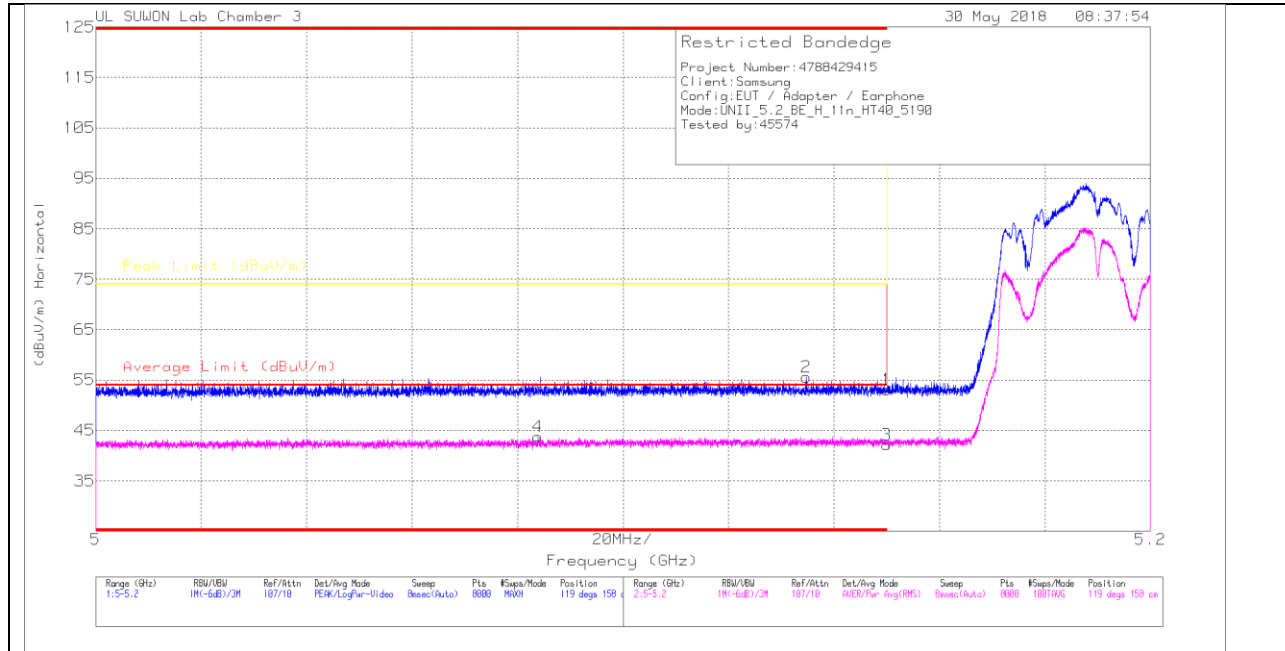
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

11.1.3.TX Above 1GHz 802.11n HT40 2Tx CDD MODE IN THE 5.2GHz BAND RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

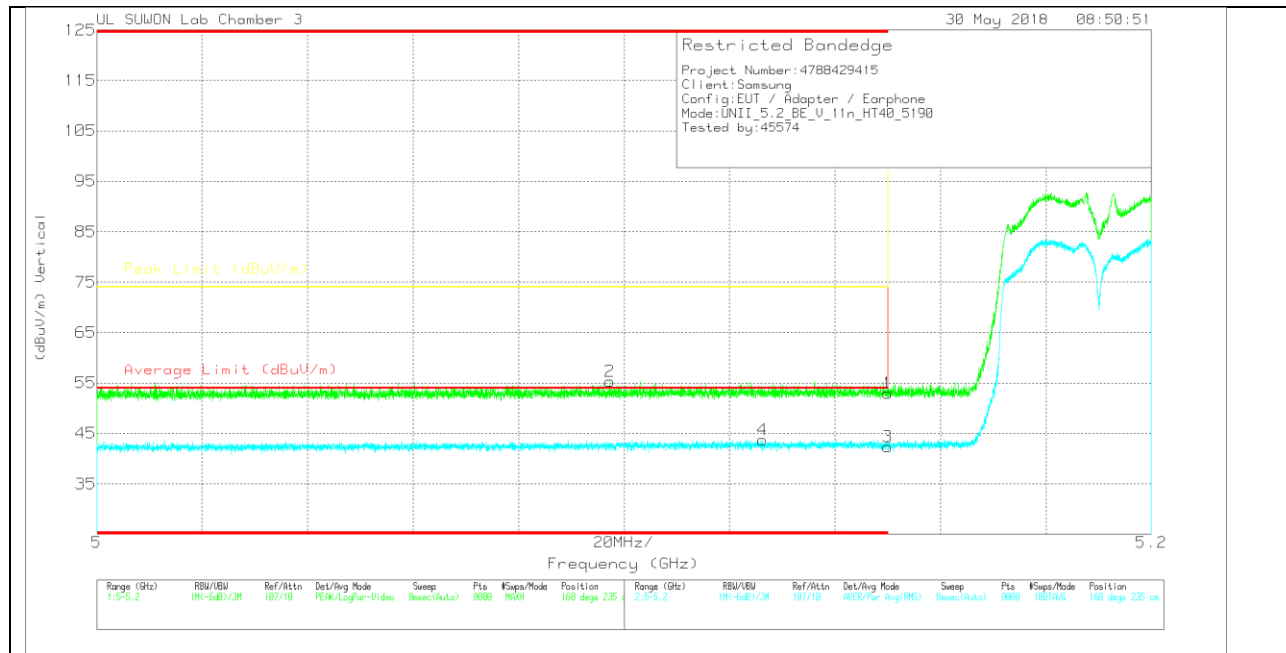
Marker	Frequency (GHz)	Meter Reading (dBu/m)	Det	3117(00205959)	10dB_ATT(dB)	DC Corr (dB)	Corrected Reading (dBu/m)	Average Limit (dBu/m)	Margin (dB)	Peak Limit (dBu/m)	PK Margin (dB)	Altitude (Degs)	Height (cm)	Polarity
1	* 5.15	37.62	PK	34.3	-18.8	0	53.12	-	-	74	-20.88	119	158	H
2	* 5.135	40.21	PK	34.3	-18.9	0	55.61	-	-	74	-18.39	119	158	H
3	* 5.15	26.94	RMS	34.3	-19.3	.24	42.18	54	-11.82	-	-	119	158	H
4	* 5.084	28.76	RMS	34.2	-19.4	.24	43.8	54	-10.2	-	-	119	158	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117[00205959]	10dB_ATT[dB]	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.15	37.44	Pk	34.3	-18.8	0	52.94	-	-	74	-21.06	160	235	V
2	* 5.097	39.92	Pk	34.2	-18.8	0	55.32	-	-	74	-18.68	160	235	V
3	* 5.15	27.09	RMS	34.3	-19.3	.24	42.33	54	-11.67	-	-	160	235	V
4	* 5.126	28.54	RMS	34.3	-19.3	.24	43.78	54	-10.22	-	-	160	235	V

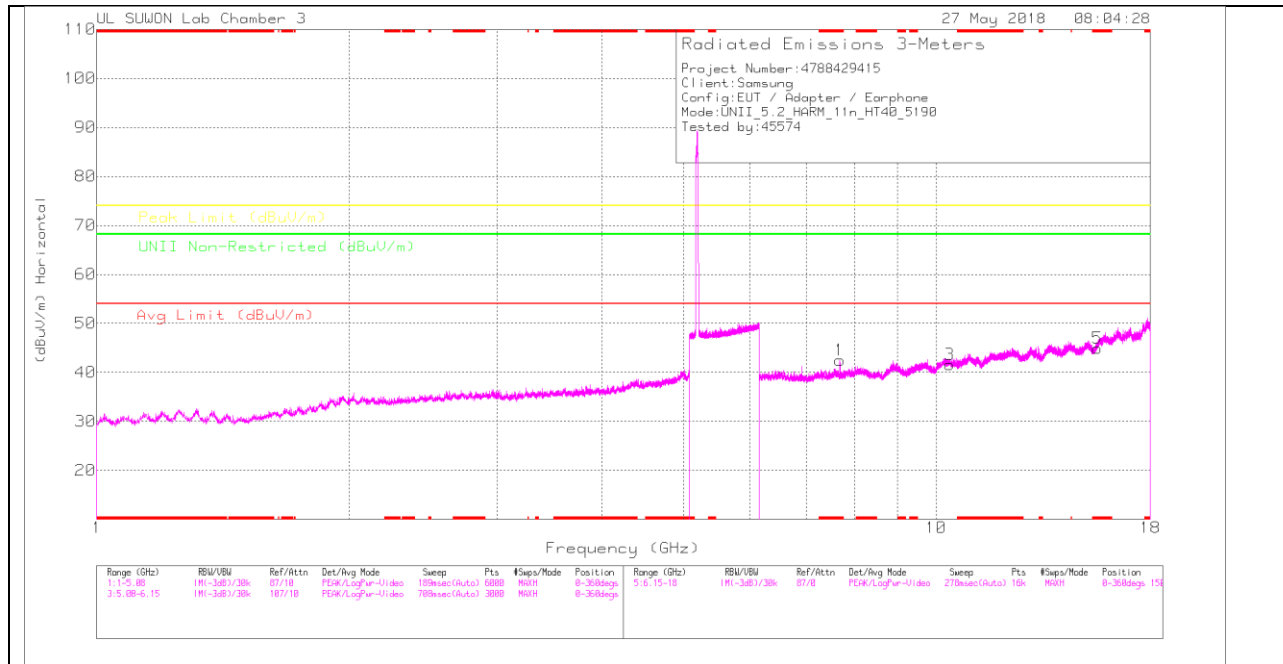
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

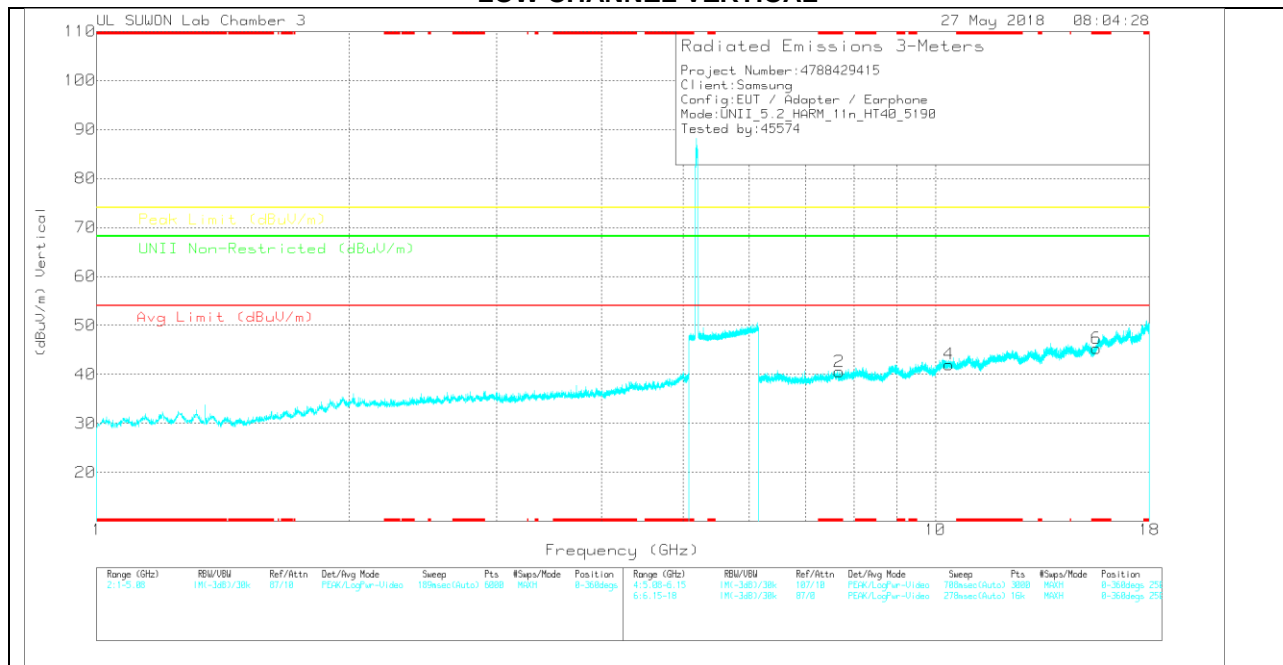
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0020959)	@Ghz_HF(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unit Non-Restricted (dBuV/m)	Margin (dB)	Altitude (Degs)	Height (cm)	Polarity
1	* 7.679	30.2	PK	35.6	-23.3	0	42.5	-	-	74	-31.5	-	-	0-360	150	H
3	10.381	23.27	PK	37.5	-19.2	0	41.57	-	-	-	-	68.2	-26.63	0-360	250	H
5	* 15.571	24.4	PK	40.1	-19.6	0	44.9	-	-	74	-29.1	-	-	0-360	150	H
2	* 7.679	28.24	PK	35.6	-23.3	0	40.54	-	-	74	-33.46	-	-	0-360	250	V
4	10.381	23.73	PK	37.5	-19.2	0	42.03	-	-	-	-	68.2	-26.17	0-360	149	V
6	* 15.571	24.77	PK	40.1	-19.6	0	45.27	-	-	74	-28.73	-	-	0-360	149	V

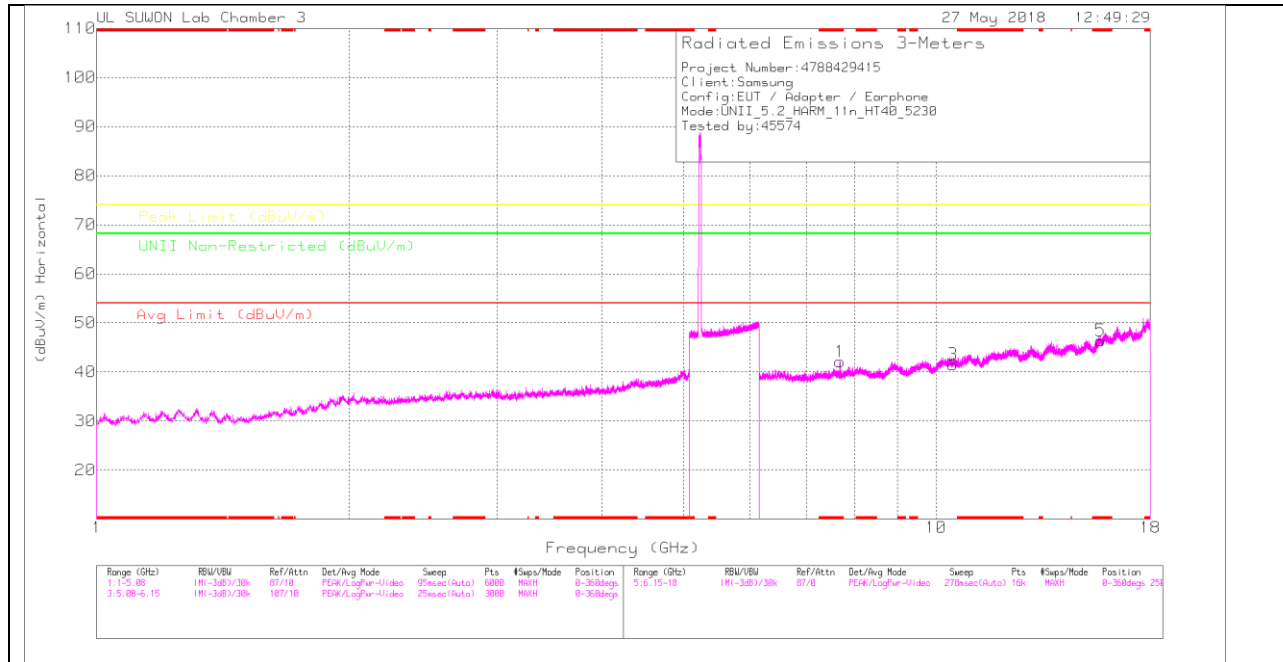
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
PK – Peak Detector

Radiated Emissions

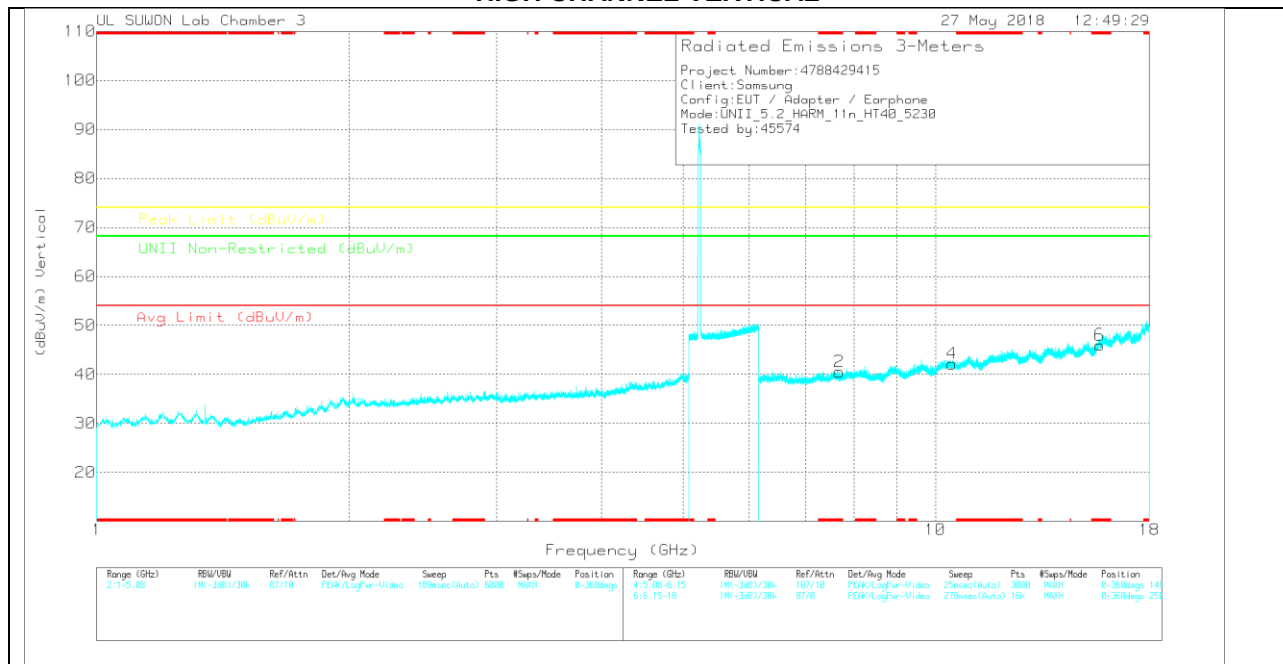
Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0020959)	@Ghz_HF(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Unit Non-Restricted (dBuV/m)	Margin (dB)	Altitude (Degs)	Height (cm)	Polarity
* 7.68	33.61	PK-U	35.6	-23.3	0	45.91	-	-	74	-28.09	-	-	111	236	H
* 7.68	27.04	ADR	35.6	-23.3	0	39.34	54	-14.66	-	-	-	-	111	236	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
PK-U - U-NII: Maximum Peak
ADR - U-NII AD primary method, RMS average

HIGH CHANNEL HORIZONTAL



HIGH CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00205959)	6GHz_HF(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 7.68	29.8	PK	35.6	-23.3	0	42.1	-	-	74	-31.9	-	-	0-360	250	H
3	10.46	23.29	PK	37.6	-19.4	0	41.49	-	-	-	-	68.2	-26.71	0-360	150	H
5	* 15.691	25.28	PK	40.4	-19.3	0	46.38	-	-	74	-27.62	-	-	0-360	150	H
2	* 7.679	28.2	PK	35.6	-23.3	0	40.5	-	-	74	-33.5	-	-	0-360	149	V
4	10.46	23.97	PK	37.6	-19.4	0	42.17	-	-	-	-	68.2	-26.03	0-360	149	V
6	* 15.691	24.88	PK	40.4	-19.3	0	45.98	-	-	74	-28.02	-	-	0-360	149	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
PK – Peak Detector

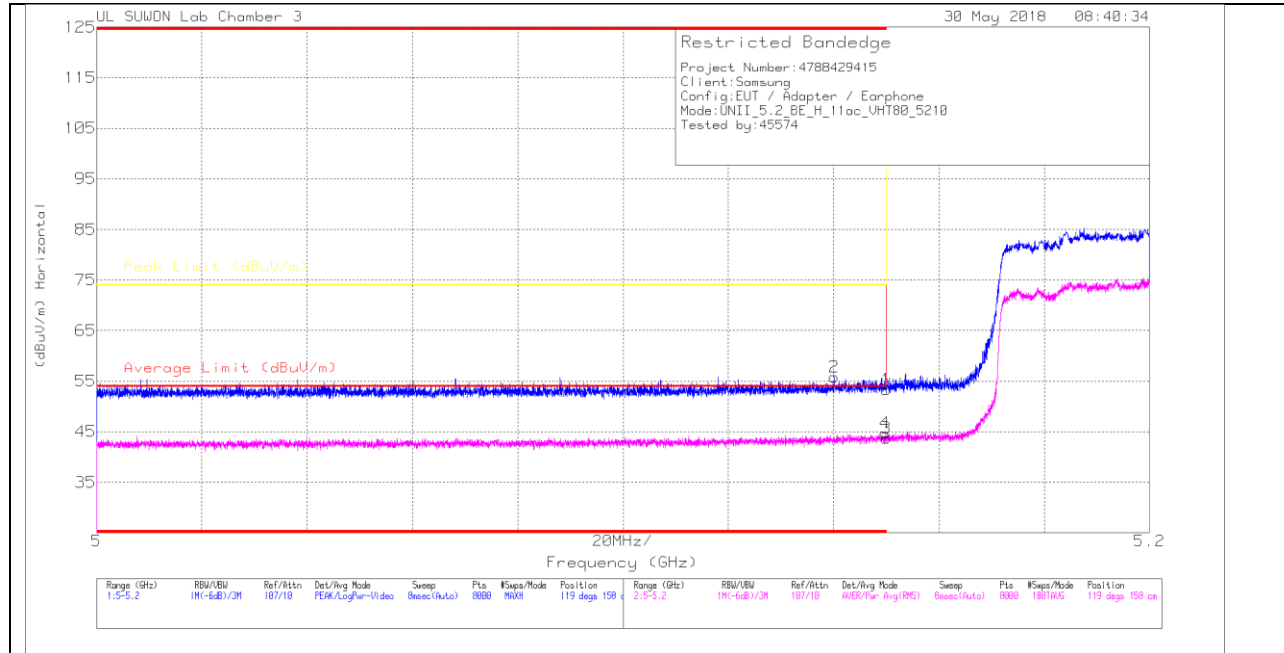
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00205959)	6GHz_HF(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 7.679	33.9	PK-U	35.6	-23.3	0	46.2	-	-	74	-27.8	-	-	111	235	H
* 7.68	26.82	ADR	35.6	-23.3	0	39.12	54	-14.88	-	-	-	-	111	235	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
PK-U - U-NII: Maximum Peak
ADR - U-NII AD primary method, RMS average

11.1.4.TX ABOVE 1GHz 802.11ac VHT80 2Tx CDD MODE IN THE 5.2GHz BAND RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00205959)	10dB_ATT(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.15	37.88	Pk	34.3	-18.8	0	53.38	-	-	74	-20.62	119	158	H
2	* 5.14	40.45	Pk	34.3	-18.9	0	55.85	-	-	74	-18.15	119	158	H
3	* 5.15	28.24	RMS	34.3	-19.3	.53	43.77	54	-10.23	-	-	119	158	H
4	* 5.15	29.2	RMS	34.3	-19.3	.53	44.73	54	-9.27	-	-	119	158	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection